



NEPA PROCESS STUDY

AN EVALUATION OF THE IMPLEMENTATION AND ADMINISTRATION OF THE **NATIONAL ENVIRONMENTAL POLICY ACT** BY THE FOREST SERVICE AND THE BUREAU OF LAND MANAGEMENT

FEBRUARY 1974

PREPARED FOR
THE COUNCIL ON ENVIRONMENTAL QUALITY
EXECUTIVE OFFICE OF THE PRESIDENT



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THE NATIONAL ENVIRONMENTAL POLICY ACT PROCESS STUDY:

An Evaluation of the Implementation and Administration
of the NEPA by the Forest Service and Bureau of Land Management

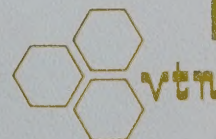
DRAFT REPORT

January 31, 1974

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CHAPTER I INTRODUCTION

A. PURPOSE OF THE REPORT

1. General

The overall purpose of the study, as developed by the Council on Environmental Quality (CEQ), was to conduct a study of the impact that the National Environmental Policy Act of 1969 has had on the decision-making processes of the Forest Service (Department of Agriculture) and the Bureau of Land Management (Department of the Interior). Based on the impact assessment and evaluation, recommendations were to be prepared for improving the integration of the requirements of the Act into those processes of the respective agencies.

2. Specific

In the evaluation of the referenced agencies decision-making processes it was required that detailed evaluations be made of the influence of NEPA on the administration of the land and resource management programs of the Forest Service and the Bureau of Land Management. In the conduct of the study, the Council (CEQ) directed that the following specific tasks be undertaken:

- o A detailed analysis be made of the relationships between the land use planning, implementation and control procedures and the procedures employed for conducting environmental analysis and preparation of environmental impact statements.
- o Develop an equitable cost allocation scheme that would distinguish between those costs directly attributable to the preparation of environmental impact statements and those costs attributed to the preparation of material prepared by the agencies in complying with their general land use planning procedures.
- o Identify and analyze twelve case histories of selected resource development activities to track the decision-making process and identify the stages at which environmental issues were incorporated into the land and resource use planning system.

CHAPTER 1
INTRODUCTION

A. PURPOSE OF THE REPORT

1. General

The overall purpose of the study, as developed by the Council on Environmental Quality (CEQ), was to conduct a study of the impact that the National Environmental Policy Act of 1969 has had on the decision-making processes of the Forest Service (Department of Agriculture) and the Bureau of Land Management (Department of the Interior). Based on the impact assessment and evaluation, recommendations were to be prepared for improving the integration of the requirements of the Act into those processes of the respective agencies.

2. Specific

In the evaluation of the relevant agency decision-making processes it was required that detailed evaluations be made of the influence of NEPA on the administration of the land and resource management programs of the Forest Service and the Bureau of Land Management. In the conduct of the study, the Council (CEQ) directed that the following specific tasks be undertaken:

1. A detailed analysis be made of the relationships between the land use planning, implementation and control processes and the procedures employed for conducting environmental analysis and preparation of environmental impact statements.
2. Develop an equitable cost allocation scheme that would distinguish between those costs directly attributable to the preparation of environmental impact statements and those costs attributable to the preparation of material reported in the agency's compliance with their general land planning processes.
3. Identify and analyze twelve case histories of selected resource development activities to track the decision-making process and identify the stages at which environmental issues were incorporated into the land and resource planning system.

- o Analyze the effectiveness of the environmental impact statement review and comment process.
- o Prepare draft amendatory language to various guidelines, directives, bulletins and regulations.

The results of the evaluations described above and the findings-conclusions derived therefrom were to be prepared in report format for submission to the Council. The information set forth in the following chapters of this report constitute the requisite information and task findings called for in the Council study.

B. APPROACH

1. Context

The basic context within which the study was performed was that of evaluating the extent of integration of NEPA into the respective agencies planning systems. The planning system processes and procedures were evaluated to determine if the system outputs were in accordance with NEPA requirements and Council guidelines. For a detailed description of the tasks undertaken refer to Section A.2, Specific Purposes, as described above. The system outputs and the subsequent management decisions or actions taken were assessed to determine if divergencies existed between NEPA requirements and the agency system outputs or environmental analyses and environmental impact statements.

The evaluative findings set forth in this report were based on a structured approach to the study program that included:

- o Analyses of the organizational, management and operational context of the decision-making systems. This phase of the study defined and described what constituted the agency decision system or systems.
- o The next phase of the study use devoted to an analysis of operations of the systems as evidenced by their policies, plans and programs.

- o Analyze the effectiveness of the environmental impact statement review and comment process.
- o Prepare draft amendment language to various guidelines, directives, policies and regulations.

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- o Analysis of the organizational, management and operational context of the decision-making systems. This phase of the study defined and described what constituted the agency decision system or systems.
- o The next phase of the study was devoted to an analysis of operations of the systems as evidenced by their policies, plans and programs.

- o Based on the analyses of the systems and their operations, a series of case studies were undertaken to test and evaluate if the agency system outputs were in conformance with NEPA requirements.
- o The ultimate phase of the study was devoted to deriving findings and conclusions from the various tasks undertaken, as described above, and in formulating recommendations for changes, modifications or revisions in agency operations and procedures.

2. Requirements

The guidance framework for the conduct of the subject study was that mandate contained in NEPA, particularly as to the agency requirement imposed relating to administration of the policies and goals. Compliance with the purposes and provisions of the Act was directed in the form of a continued on-going review process of all agency policies, procedures and regulations.

Implementation of the above stated change was effected through policy directives embodied in NEPA relating to agency decision-making on their proposals for legislation significantly affecting the quality of the human environment (i.e., legislative actions) and all other major Federal actions significantly affecting the quality of the human environment (i.e., administrative actions). It is to this last area, namely administrative actions, that the subject study was directed.

Administrative actions, as evidenced by the operations of the agencies planning systems and the subsequent outputs, were considered to encompass all new and continuing projects, program activities, and the making, modification or establishment of regulations, rules, procedures and policy. In essence, virtually every action taken by the agencies in the performance of program activities was deemed as an appropriate matter for the evaluation of activities being undertaken in the study. This was particularly true with respect to the

Based on the analysis of the systems and subsystem operations, a series of case studies were undertaken to test and evaluate the agency's operations. These in conjunction with NPSA reports.

The ultimate phase of the study was devoted to deriving findings and recommendations from the various tasks undertaken, as described above, and in formulating recommendations for changes, modifications or revisions in agency operations and procedures.

3. Recommendations

The guidance framework for the conduct of the subject study was that mandate contained in NPSA, particularly as to the agency's responsibility to conduct studies to determine the effectiveness of its policies and goals.

Compliance with the purposes and provisions of the Act was directed in the form of a completed on-going review process at all agency offices, programs and responsibilities.

Implementation of the above stated change was effected through policy directives embodied in NPSA relating to agency activities relating on their operations for legislative activities affecting the quality of the human environment (i.e., legislative actions) and all other major Federal actions significantly affecting the quality of the human environment (i.e., administrative actions). It is to this last area, namely administrative actions, that the subject study was directed.

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operation and performance of the agencies' planning systems. Further, the specific charge of the Council contemplated this broad overview of the agencies and their systems. (Refer to Section A.2, Specific Purpose above.) Accordingly, a study program methodology was developed to perform the evaluation analyses called for as described above.

3. Study Methodology

The methodology employed in performance of the study program consisted of the following major areas:

- o Review, analysis and evaluation of NEPA requirements, Executive Order 11514 directives, Council regulations and guidelines, Office of Management and Budget Circulars, and specific agency regulations, procedural guidelines and directives and general agency data and information materials.
- o Interviews and discussions with Council, Department and and Forest Service-Bureau of Land Management staff personnel on matters of policy interpretations, procedural operations, action processes, and various other operations.
- o Issuance of a series of working papers at key milestone periods during the study program indicating findings and problem areas on an incremental basis for Council and agency review, critique and evaluation.
- o Utilization of a joint task force/review committee composed of staff representatives from the Council, Forest Service, Bureau of Land Management and the Environmental Protection Agency to guide study direction, emphasis, findings and outputs.
- o The conduct of twelve case study evaluations to analyze the decision-making processes employed by the agencies.
- o Preparation of a report document that contains the findings, conclusions and recommendations occurring from the performance of the study in the steps and manner described in the foregoing paragraphs.

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CHAPTER II

REVIEW OF ORGANIZATION/MANAGEMENT RESPONSIBILITIES FOR IMPLEMENTING NEPA

A. DISCUSSION OF PURPOSE

"Environment as an issue is in the process of maturing."* There is a growing awareness not only of the consequences of man's activities to the physical environment but to the human environment as well. It has become apparent that environmental issues cannot be ignored in decision-making. Decisions must include the environmental aspect in addition to the economic, social and political perspectives. The effort to achieve environmental quality has been accorded national prominence with the passage of the National Environmental Policy Act of 1969.

NEPA has become the basic policy setting law relating to the protection of the environment. The intent of the act is to establish a national policy for the environment to promote a harmonious and protective relationship between man and his environment and to prevent or eliminate environmental degradation. To accomplish this goal, NEPA injects into the decision-making process of Federal agencies the formal consideration of environmental factors by means of the environmental impact statement. To coordinate Federal actions, NEPA has instituted the Council on Environmental Quality at the Executive level to appraise programs and activities of the Federal Government in the light of national environmental policy and recommend additional policies to promote the improvement of the quality of the environment.

*Environmental Quality, the Second Annual Report of the Council on Environmental Quality, CEQ, August 1971.

CHAPTER II
REVIEW OF ORGANIZATION/MANAGEMENT
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A. DISCUSSION OF PURPOSE

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B. DEFINITION OF RESPONSIBILITIES OF FEDERAL AGENCIES FOR COMPLIANCE

NEPA requires Federal agencies to give appropriate consideration to environmental values in all decisions and review existing policies and operations in accordance with the Act. NEPA, Section 102, directs all agencies of the Federal Government to:

1. Utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision-making which may have an impact on man's environment;
2. Identify and develop methods and procedures, in consultation with the Council on Environmental Quality which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decision-making along with economic and technical considerations;
3. Include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed environmental statement which shall accompany the proposal through the existing agency review processes;
4. Study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources;
5. Recognize the worldwide and long-range character of environmental problems and, where consistent with the foreign policy of the United States, lend appropriate support to initiatives, resolutions, and programs designed to maximize international cooperation in anticipating and preventing a decline in the quality of mankind's world environment;
6. Make available to States, counties, municipalities, institutions, and individuals, advice and information useful in restoring, maintaining, and enhancing the quality of the environment;
7. Initiate and utilize ecological information in the planning and development of resource-oriented projects; and
8. Assist the Council of Environmental Quality.

NEPA also mandates in Section 103 that: "All agencies of the Federal Government shall review their present statutory authority, administrative

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1. Utilize a systematic, interdisciplinary approach which will insure the integration of the natural and social sciences and the environmental design into the planning and decision-making which may have an impact on man's environment;
2. Identify and develop methods and procedures, in consultation with the Council on Environmental Quality which will insure that properly qualified environmental specialists and values may be given appropriate consideration in decision-making along with economic and technical considerations;
3. Include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement of the environmental impacts of the proposed action, including the existing agency review process;
4. Study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves major Federal actions which require the use of available resources;
5. Recognize the worldwide and long-range character of environmental problems and, where consistent with the foreign policy of the United States, lead and encourage appropriate action to meet such problems; and programs designed to maximize international cooperation in meeting and preventing a decline in the quality of mankind's world environment;
6. Make available to States, counties, municipalities, institutions, and individuals, advice and information useful in restoring, maintaining, and enhancing the quality of the environment;
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NEPA also mandates in Section 102 that: "All agencies of the Federal

Government shall review their present statutory authority, administrative

regulations, and current policies and procedures for the purpose of determining whether there are any deficiencies or inconsistencies therein which prohibit full compliance with the purposes and provisions of this Act...."

Executive Order 11514, March 5, 1970, further clarified NEPA responsibilities of Federal agencies. To comply with the Act, the heads of Federal agencies have been directed to:

1. Monitor, evaluate, and control on a continuing basis their agencies' activities so as to protect and enhance the quality of the environment. Such activities shall include those direct to controlling pollution and enhancing the environment and those designed to accomplish other program objectives which may affect the quality of the environment.
2. Develop procedures to ensure the fullest practicable provision of timely public information and understanding of Federal Plans and programs with environmental impact in order to obtain the views of interested parties. These procedures shall include, whenever appropriate, provision for public hearings, and shall provide the public with relevant information, including information on alternative courses of action.
3. Insure that information regarding existing or potential environment problems and control methods developed as part of research, development, demonstration, test, or evaluation activities is made available to Federal agencies, States, counties, municipalities, institutions, and other entities, as appropriate.
4. Review their agencies' statutory authority, administrative regulations, policies, and procedures, including those relating to loans, grants, contracts, leases, licenses, or permits, in order to identify any deficiencies or inconsistencies therein which prohibit or limit full compliance with the purposes and provisions of the Act.
5. Engage in exchange of data and research results, and cooperate with agencies of other governments to foster the purposes of the Act.
6. Proceed, in coordination with other agencies, with actions required by section 102 of the Act.

C. DISCUSSION OF MAJOR COMPLIANCE: EIS

To ensure that Federal agencies award an appropriate level of attention to environmental values in decision-making, NEPA included the Environmental Impact Statement. The EIS has become that mechanism which compels agency

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2. Develop procedures to ensure the fullest practicable provision of timely public information and understanding of Federal Plans and programs with environmental impact in order to obtain the views of interested parties. These procedures shall include, wherever appropriate, provision for public hearings, and shall provide the public with relevant information, including information on alternative courses of action.
3. Insure that information regarding existing or potential environmental problems and control methods developed as part of research, development, demonstration, test, or evaluation activities is made available to Federal agencies, States, counties, municipalities, institutions, and other entities, as appropriate.
4. Review their agency's statutory authority, administrative regulations, policies, and procedures, including those related to loans, grants, contracts, leases, licenses, or permits, in order to insure that deficiencies or inconsistencies therein which preclude full compliance with the purposes and provisions of the Act.
5. Engage in exchange of data and research results, and cooperate with agencies of other governments to foster the purposes of the Act.
6. Proceed in coordination with other agencies, with actions required by section 102 of the Act.

C. DISCUSSION OF MAJOR COMPLIANCE

To ensure that Federal agencies award an appropriate level of attention to environmental values in decision-making, NEPA included the Environmental Impact Statement. The EIS has become the mechanism which compels agency

compliance with the spirit of the newly created Act. NEPA stipulates that any major Federal action which may inflict significant alteration to the environment must be accompanied by the EIS which, essentially, enumerates the severity of these potential impacts.

CEQ promulgated an initial set of guidelines, since updated and revised, which translate the goal and function of NEPA into workable format. The following is a brief descriptive outline of the key components stated in the CEQ guidelines.

- Agencies are required to make an initial assessment of the environmental impacts for the proposed action. This is the decision document and/or level for the determination of significant effects and recommendations to prepare the EIS.
- The Council requires the agencies to identify the types and classes of actions likely to require the statement and those actions likely not to require the statement.
- The EIS serves as a means of assessing the environmental impact of proposed actions rather than as a justification for the implementation of the proposed action.
- When more than one agency sponsors an action, the involved agencies should consider the preparation of a joint statement or designate one of the participant agencies as the single "Lead agency" for the preparation of the EIS.
- The proposed action is to be described as related to the existing and proposed land use plans, policies, and controls at the Federal, State, and local levels.
- Positive and negative effects of the proposed action as well as primary and secondary effects to the national and international environments are to be included under the subject of probable impact. Inherent in secondary considerations are assessments of possible change in population patterns or growth upon the resource base and investment and demand for public services.
- Generation of a reasonable range of alternatives to the proposed action to include the alternative of "no action." Analysis to be sufficiently detailed to "reveal the agency's comparative evaluation of the environmental benefits, costs, and risks of the proposed action and each reasonable alternative."
- A discussion of the tradeoffs between short-term environmental gains at the expense of long-term losses or vice versa in terms of significant environmental impacts of the proposed action.

compliance with the spirit of the newly revised NEPA regulations that any major Federal action which may have significant effects on the environment must be accompanied by the EIS which, essentially, encompasses the necessity of these potential impacts.

CNE promulgated an initial set of guidelines, since updated and revised, which transfer the goal and function of NEPA into workable format. The following is a brief descriptive outline of the key components stated in the CNE guidelines:

- Agencies are required to make an initial assessment of the environmental effects for the proposed action. This is the decision document and/or basis for the determination of significant effects and recommendations to prepare the EIS.
- The CNE requires agencies to identify the types and classes of actions likely to require the statement and those actions likely not to require the statement.
- The EIS serves as a means of assessing the environmental impact of proposed actions rather than as a justification for the implementation of the proposed action.
- When more than one agency sponsors an action, the involved agencies should coordinate the preparation of a joint statement or designate one of the participant agencies as the single "lead agency" for the preparation of the EIS.
- The proposed action is to be described as related to the existing and proposed land use, natural, political, and economic at the Federal, State, and local levels.
- Positive and negative effects of the proposed action as well as primary and secondary effects to the national and international environment are to be included under the subject of public impact. Independent in secondary considerations a assessment of possible changes in population patterns or growth from the resource base and investment and demand for public services.
- Generation of a reasonable range of alternatives to the proposed action to include the alternative of "no action." Analysis to be sufficiently detailed to permit the agency's comparative evaluation of the environmental benefits, costs, and risks of the proposed action and each reasonable alternative.
- A discussion of the benefits between short-term environmental gains at the expense of long-term losses or vice versa in terms of significant environmental impacts of the proposed action.

- An identification of the unavoidable impacts the extent to which the action irreversibly curtails the range and use of potential natural and cultural resources.
- Agency staff includes the representation of the relevant disciplines necessary to prepare the EIS and the employment of the staff in an interdisciplinary form.
- Provisions are to exist in the EIS process to encourage public participation at the earliest possible time and to facilitate inclusion of public comment.
- Agency review of outside agency's statements emphasizes the assessment of the environmental impacts of the proposed actions and/or new alternatives that would avoid or minimize adverse environmental impacts.
- The EIS should be written in a manner that is understandable to the public. Decisions must be clear and logically developed.

The prescribed content of the EIS set forth by NEPA and CEQ Guidelines include the following points to be covered.

1. A description of the proposed action, a statement of its purposes, and a description of the environment affected, including information, summary technical data, and maps and diagrams where relevant, adequate to permit an assessment of potential environmental impact by commenting agencies and the public.
2. The relationship of the proposed action to land use plans, policies, and controls for the affected area.
3. The probable impact of the proposed action of the environment.
4. Alternatives to the proposed action including, where relevant, those not within the existing authority of the responsible agency.
5. Any probable adverse environmental effects which cannot be avoided (such as water or air pollution, undesirable land use patterns, damage to life systems, urban congestion, threats to health or other consequences adverse to the environmental goals set out in section 101 (b) of the Act).
6. The relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity.
7. Any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented.
8. An indication of what other interests and considerations of Federal policy are thought to offset the adverse environmental effects of the proposed action identified pursuant to paragraphs (3) and (5) of this section.

An identification of the unavoidable impacts the extent to which the action is necessary to protect the range and use of potential natural and cultural resources.

Agency staff includes the representation of the relevant disciplines necessary to prepare the EIS and the employment of the staff in an interdisciplinary form.

Provisions are to exist in the EIS process to encourage public participation at the earliest possible time and to facilitate inclusion of public comments.

Agency review of outside agency's statements emphasizes the assessment of the environmental impacts of the proposed actions and/or new alternatives that would result at individual, overall environmental impacts.

The EIS should be written in a manner that is understandable to the public. Decisions must be clear and logically developed.

The prescribed content of the EIS and format by NEPA and CEQ Guidelines

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3. The probable impact of the proposed action on the environment.
4. Alternatives to the proposed action including, where relevant, those not within the existing authority of the responsible agency.
5. Any probable adverse environmental effects which cannot be avoided (such as water or air pollution, undesirable land use patterns, damage to life systems, urban congestion, threats to health or other consequences adverse to the environmental goals set out in section 101 (b) of the Act).
6. The relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity.
7. Any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented.
8. An indication of what other interests and considerations of Federal policy are thought to offset the adverse environmental effects of the proposed action identified pursuant to paragraphs (3) and (6) of this section.

D. ROLES OF CEQ AND EPA

1. Council on Environmental Quality (CEQ)

The Council on Environmental Quality was established by the National Environmental Policy Act of 1969 to formulate and recommend National policies to promote the improvement of the quality of the environment. The Office of Environmental Quality, which provides staff for the Council, was subsequently established by title II of the Environmental Quality Improvement Act of 1970. The duties and functions of the Council are:

- a. To assist and advise the President in the preparation of the Environmental Quality Report.
- b. To gather timely and authoritative information concerning the conditions and trends in the quality of the environment both current and prospective, to analyze and interpret such information for the purpose of determining whether such conditions and trends are interfering, or are likely to interfere, with the achievement of the policy set forth in NEPA, and to compile and submit to the President studies relating to such conditions and trends;
- c. To review and appraise the various programs and activities of the Federal Government in the light of the policy set forth in NEPA for the purpose of determining the extent to which such programs and activities are contributing to the achievement of such policy, and to make recommendations to the President with respect thereto;
- d. To develop and recommend to the President national policies to foster and promote the improvement of environmental quality to meet the conservation, social, economic, health, and other requirements and goals of the Nation;

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- c. To review and appraise the various programs and activities of the Federal Government in the light of the policy set forth in NEPA for the purpose of determining the extent to which such programs and activities are contributing to the achievement of such policy, and to make recommendations to the President with respect thereto.
- d. To develop and recommend to the President national policies to foster and promote the improvement of environmental quality to meet the conservation, social, economic, health, and other requirements and goals of the Nation.

- e. To conduct investigations, studies, surveys, research, and analyses relating to ecological systems and environmental quality;
- f. To document and define changes in the natural environment, including the plant and animal systems, and to accumulate necessary data and other information for a continuing analysis of these changes or trends and an interpretation of their underlying causes;
- g. To report at least once each year to the President on the state and condition of the environment; and
- h. To make and furnish such studies, reports thereon, and recommendations with respect to matters of policy and legislation as the President may request.

2. Environmental Protection Agency (EPA)

The Environmental Protection Agency (EPA) was established in the executive branch as an independent agency pursuant to Reorganization Plan 3 of 1970, effective December 2, 1970. The Agency was created to permit coordinated and effective governmental action to assure protection of the environment by the systematic abatement and control of pollution through proper integration of a variety of research, monitoring, standard setting, and enforcement activities. As a complement to its other activities, EPA coordinates and supports research and anti-pollution activities, by State and local governments, private and public groups, individuals, and educational institutions. Additionally, EPA reinforces efforts among other Federal agencies with respect to the impact of their operations on the environment, and it is specifically charged with making public its written comments on environmental impact statements and with publishing its determinations when those hold that a proposal is unsatisfactory from

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its determinations when those hold that a proposal is unsatisfactory from

the standpoint of public health or welfare or environmental quality. In all, EPA is designed to serve as the public's advocate for a livable environment.

A. BACKGROUND

1. History

The Bureau of Land Management is a product of the evolution of governmental land management agencies. The Constitution of the United States, Article IV, Section 3, gave Congress authority to administer the public lands, granting power to admit new States to the Union and "to dispose of and make all needful rules and regulations respecting the territory or other property belonging to the United States..." As the nation began to expand, the Congress, in April 1812, established the General Land Office as part of the Treasury Department. The Land Office was authorized to survey, manage, and dispose of public lands. By an act of March 1849, the Department of the Interior was created and began its existence as a consolidation for many seemingly unrelated Federal activities including the General Land Office, Office of the Census, and the Office of Indian Affairs.

The acquisition of lands between the Mississippi River and the Pacific Ocean and finally the acquisition of Alaska in 1867 provided the nation with a vast area of largely unsettled land that had not been committed to private ownership or use. The disposal of these lands to encourage settlement of the West was accomplished under the Homestead Act of 1862. Homesteading remained a means of transferring considerable Federal land into private ownership until the 1930's when most of the land suitable for farming was already in private ownership. Enacted in 1934, the Taylor Grazing Act was to segregate up to 8 million acres (later increased to 142 million) for grazing in order to stabilize the range livestock industry. A Grazing

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CHAPTER III

BUREAU OF LAND MANAGEMENT

A. BACKGROUND

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Service was established to manage the grazing lands under the direction of the Department of the Interior.

In 1946, the Bureau of Land Management was created through a Reorganization Plan by consolidation of the General Land Office and the Grazing Service. In September of 1964, Congress enacted three major laws which defined more clearly the goals and directions for the Bureau of Land Management in administering the public lands. The Classification and Multiple Use Act provided for retention and development of vast areas of the public domain while at the same time calling for disposal of other areas in the public interest. The Public Sale Act clarifies the matter of disposal to local government or to individuals, while the Public Land Law Review Commission was created to undertake a comprehensive review of all laws concerning the public lands and to make recommendations to Congress.

Today, the Bureau has exclusive jurisdiction for the management of the lands and resources of some 457 million acres of National Resource Lands which cover 20% of the nation's land base. Additionally, the agency has the responsibility for the administration of mineral resources in approximately 313 million acres where surface administration is in another agency or the land surface has been transferred to private ownership with a reservation of minerals to the Government. Lands under BLM jurisdiction are located primarily in 10 states in the far West and in Alaska; however, scattered parcels of land are in an additional 14 states.

2. Organization

The Bureau organization consist of headquarters in Washington, D.C., three detached offices having Bureauwide responsibilities, a basic field organization of state and district offices, and other field offices that perform

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Today, the Bureau has exclusive jurisdiction for the management of the lands and resources of some 47 million acres of National Resource Lands which cover 20% of the nation's land base. Additionally, the agency has the responsibility for the administration of mineral resources in approximately 513 million acres where surface administration is in another agency or the land surface has been transferred to private ownership with a reservation of minerals to the Government. Lands under BLM jurisdiction are located primarily in 10 states in the far West and in Alaska; however, scattered parcels of land are in an additional 14 states.

3. Organization

The Bureau organization consists of headquarters in Washington, D.C., three detached offices having Bureauwide responsibilities, a basic field organization of state and district offices, and other field offices that perform

limited functions. The scope of this report primarily addresses the following three levels of the BLM (Exhibit A):

a. Washington Office (Exhibit B)

The Washington office of the BLM is located in the Department of Interior building in Washington, D.C. The Washington office provides the main point of contact with the Department of Interior, other branches of government, user groups, conservationists, news media, etc. at the national level.

It provides direction to the entire Bureau by translating executive, legislative and judicial policy into Bureau programs and guidance; developing, maintaining and communicating Bureau policy; developing management systems; and issuing directives.

In addition, the Washington office is responsible for coordination and control through review and approval of state and support center program plans, annual work plans, and the issuance of operating budgets; development of coordinated management systems that provide various control reports through evaluations of field activities; and approval of technological and engineering standards.

b. State Offices (Exhibit C)

The organization of the BLM includes the following State offices:

<u>State Office Location</u>	<u>Areas of Jurisdiction</u>
Anchorage, Alaska	Alaska
Phoenix, Arizona	Arizona
Sacramento, California	California
Denver, Colorado	Colorado
Boise, Idaho	Idaho
Billings, Montana	Montana, North Dakota, South Dakota
Reno, Nevada	Nevada
Santa Fe, New Mexico	New Mexico, Oklahoma, Texas (mineral interests)
Portland, Oregon	Oregon, Washington
Salt Lake City, Utah	Utah
Cheyenne, Wyoming	Wyoming, Kansas, Nebraska
Silver Springs, Maryland	All other States (except Hawaii)

limited functions. The scope of this report primarily addresses the following three levels of the ELM (Exhibit A):

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The Washington office of the ELM is located in the Department of Interior Building in Washington, D.C. The Washington office provides the main point of contact with the Department of Interior, other branches of government, other groups, consultants, news media, etc. at the national level.

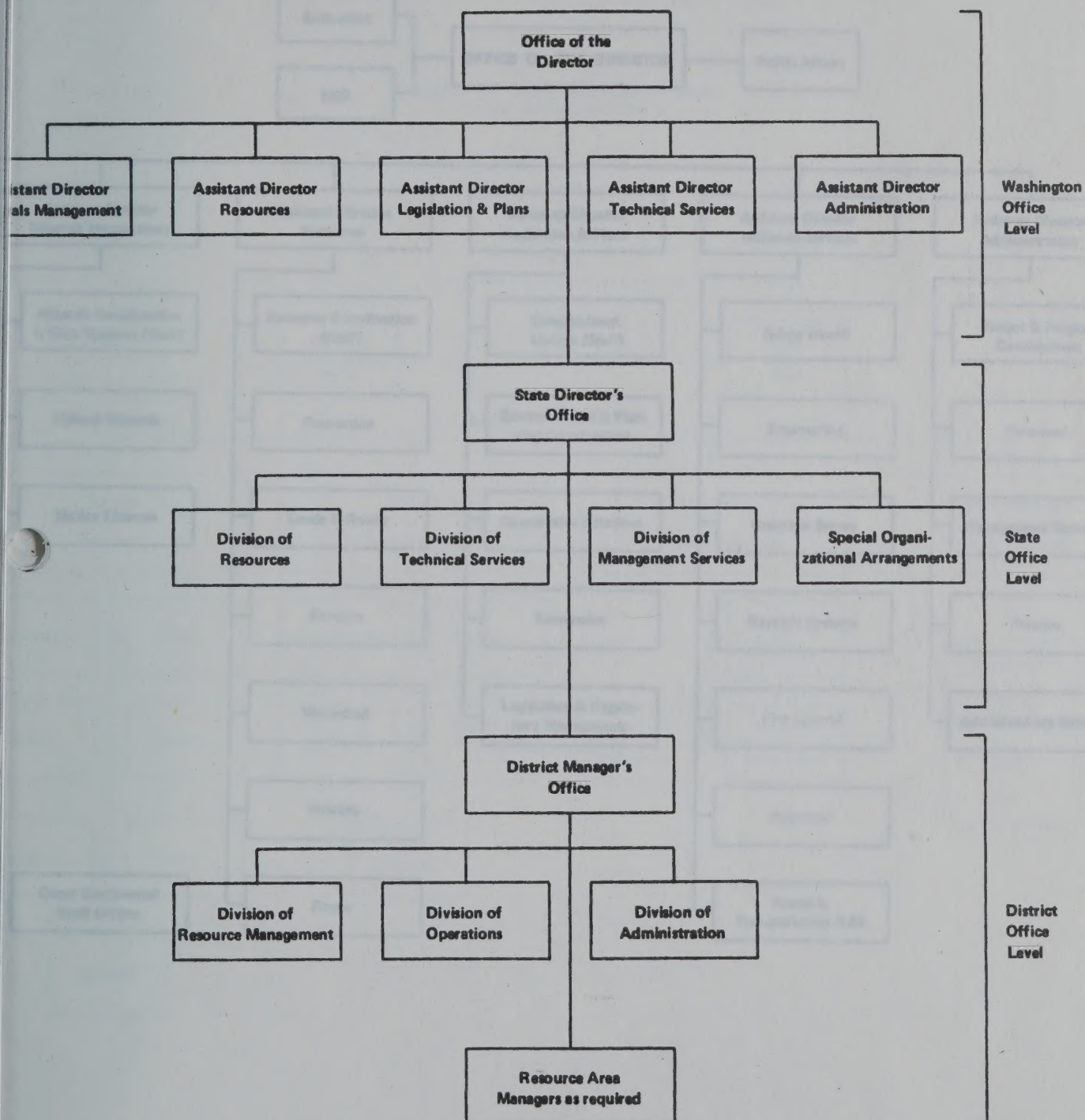
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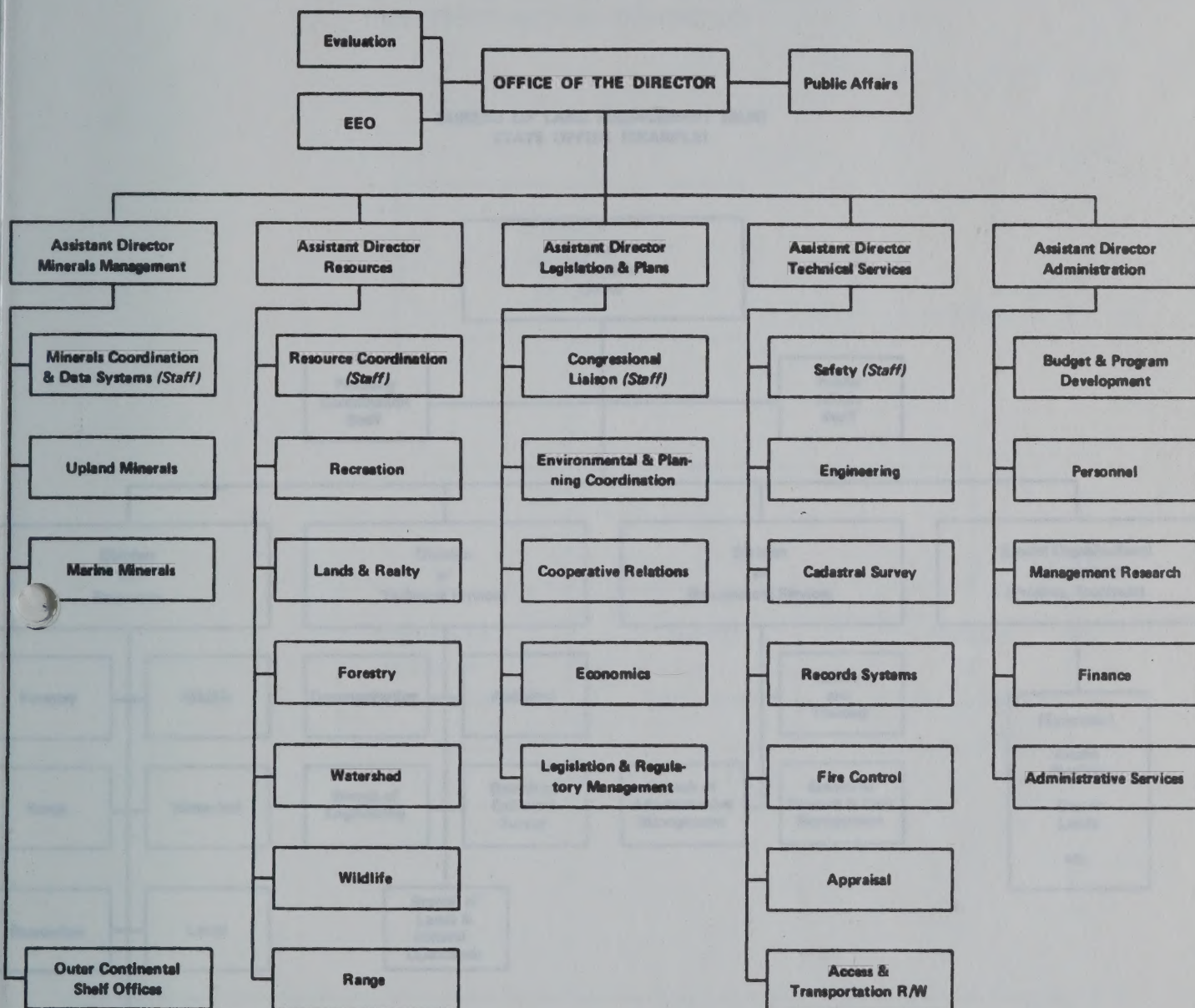
b. State Offices (Exhibit C)

The organization of the ELM includes the following State offices:

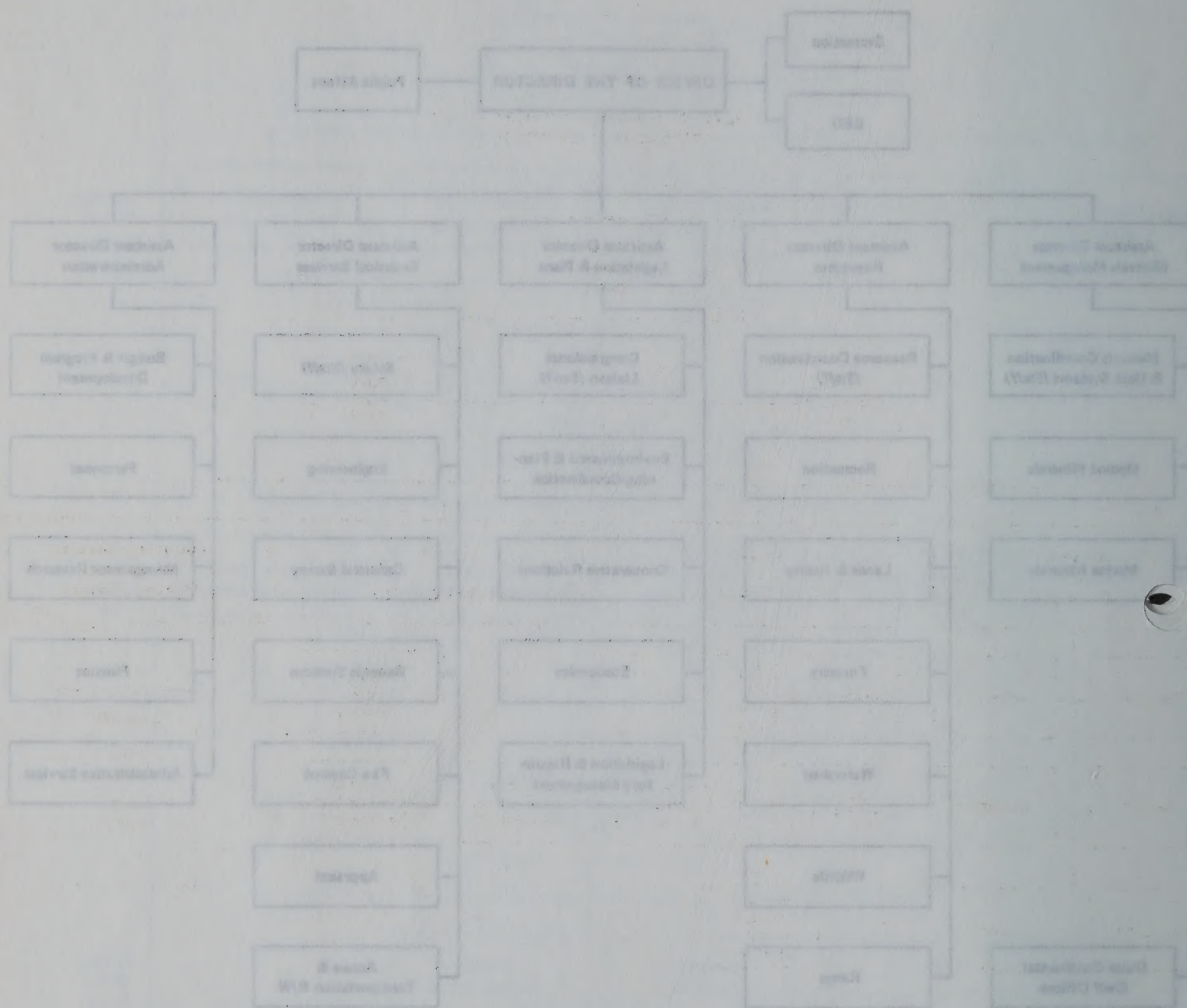
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Phoenix, Arizona	Arizona
Sacramento, California	California
Denver, Colorado	Colorado
Boise, Idaho	Idaho
Billings, Montana	Montana, North Dakota, South Dakota
Reno, Nevada	Nevada
Santa Fe, New Mexico	New Mexico, Oklahoma, Texas (mineral interests)
Portland, Oregon	Oregon, Washington
Salt Lake City, Utah	Utah
Cheyenne, Wyoming	Wyoming, Kansas, Nebraska
Silver Springs, Maryland	All other States (except Hawaii)

**BUREAU OF LAND MANAGEMENT (BLM)
DESIGNATED LEVELS**

**BUREAU OF LAND MANAGEMENT (BLM)
WASHINGTON OFFICE**

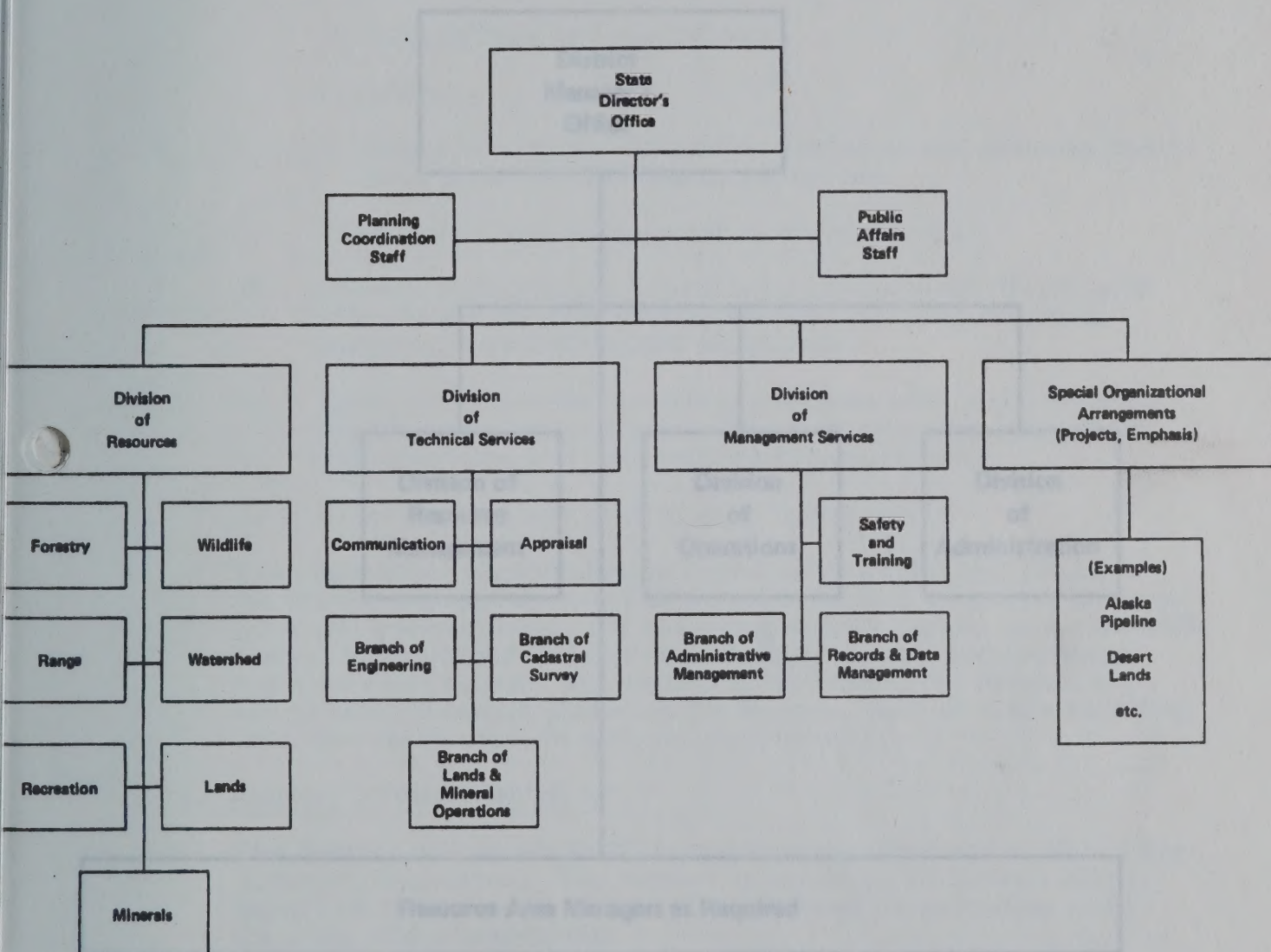


BUREAU OF LAND MANAGEMENT (BLM)
WASHINGTON OFFICE

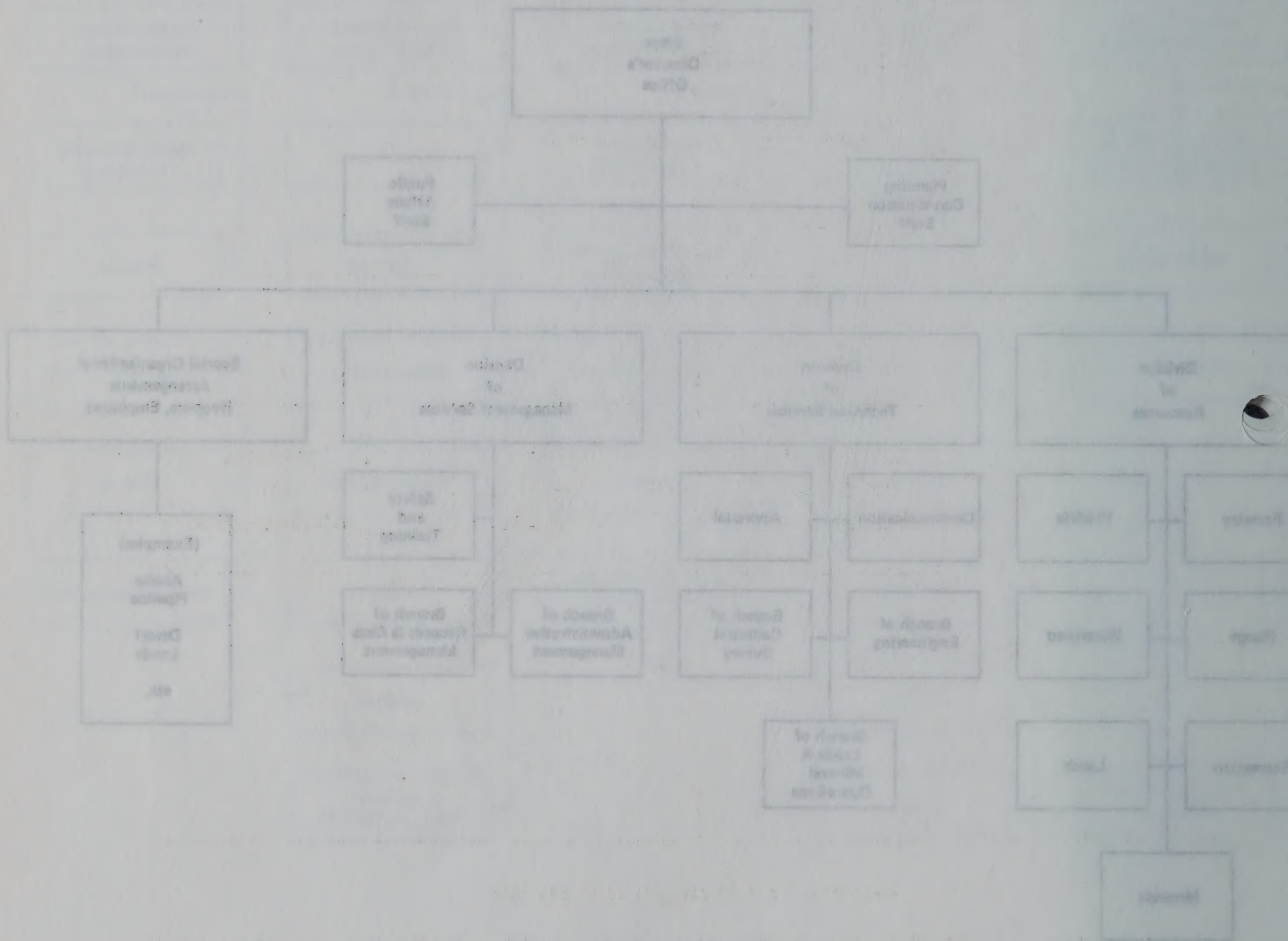


BUREAU OF LAND MANAGEMENT (BLM)
DISTRICT OFFICE (EXAMPLE)

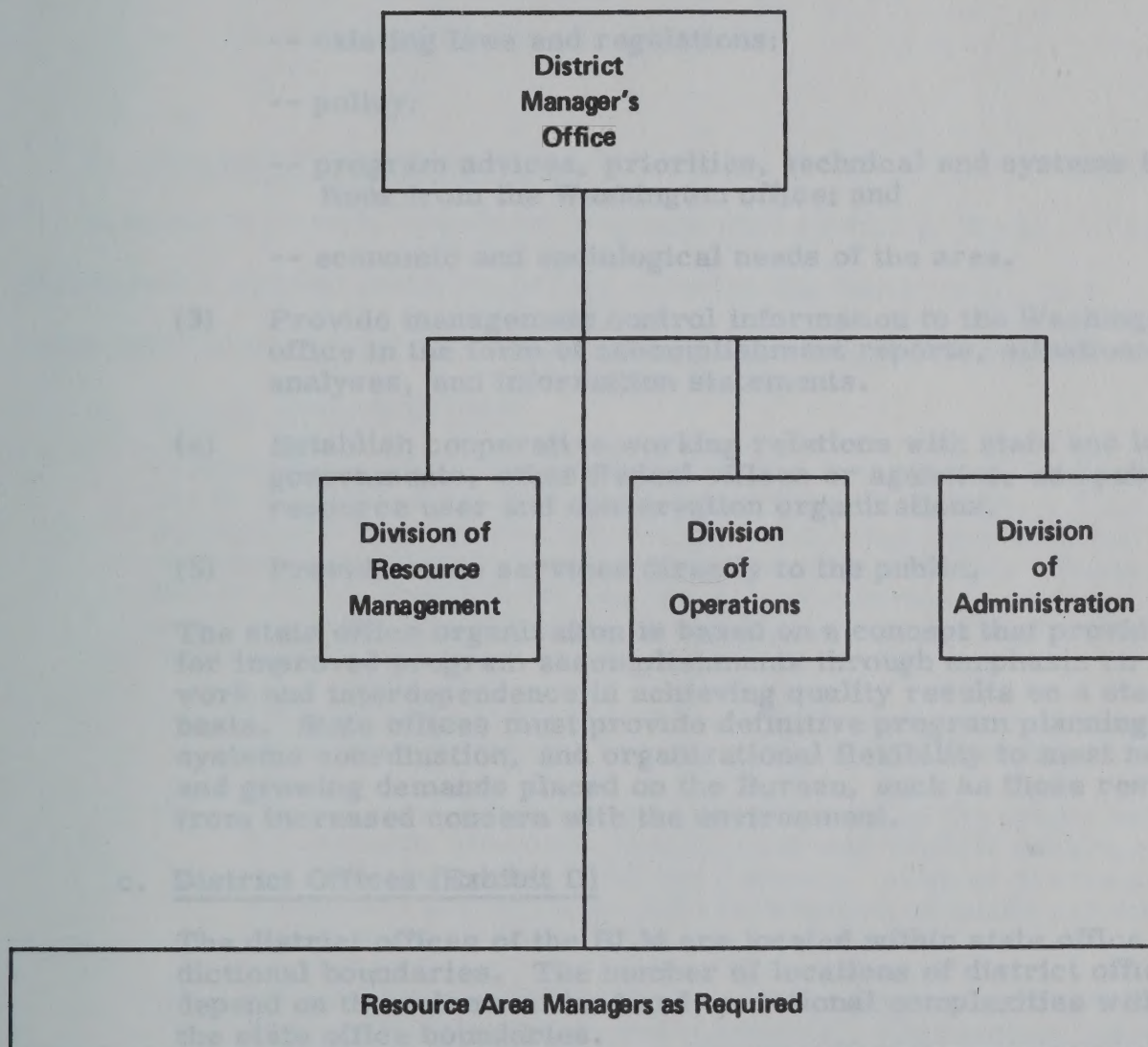
BUREAU OF LAND MANAGEMENT (BLM)
STATE OFFICE (EXAMPLE)



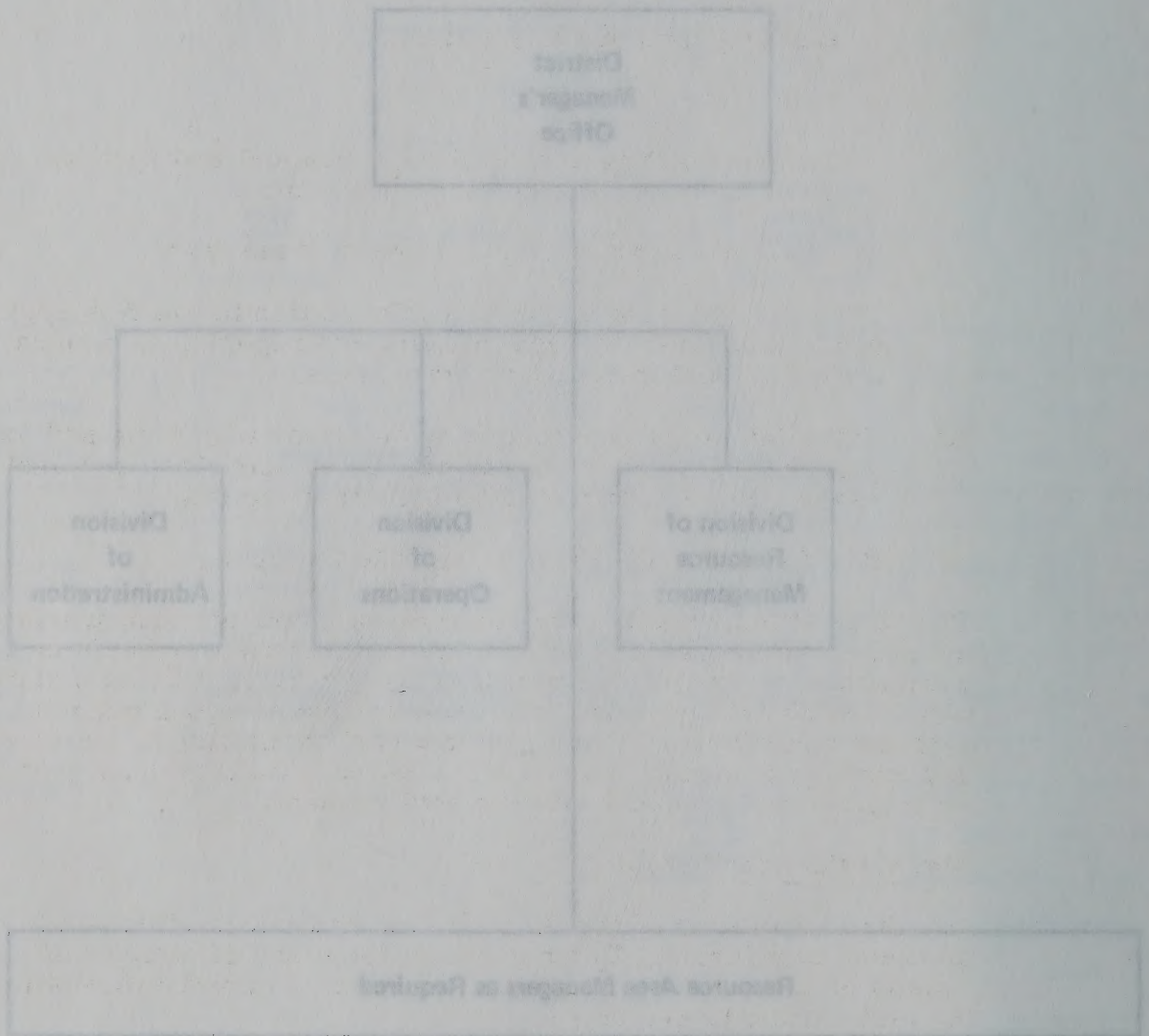
STATE OFFICE BUILDING
BUREAU OF LAND MANAGEMENT



**BUREAU OF LAND MANAGEMENT (BLM)
DISTRICT OFFICE (EXAMPLE)**



BUREAU OF LAND MANAGEMENT (BLM)
DISTRICT OFFICE (EXAMPLE)



State offices are the Bureau's intermediate level supervisory and operations offices. The state office level is responsive to the the following requirements:

- (1) Provide direction and guidance to district offices.
- (2) Develop and implement multiple-use plans and programs for the state which must be responsive to:
 - environmental protection and enhancement considerations;
 - existing laws and regulations;
 - policy;
 - program advices, priorities, technical and systems instructions from the Washington office; and
 - economic and sociological needs of the area.
- (3) Provide management control information to the Washington office in the form of accomplishment reports, situational analyses, and information statements.
- (4) Establish cooperative working relations with state and local governments, other Federal offices or agencies, and public resource user and conservation organizations.
- (5) Provide some services directly to the public.

The state office organization is based on a concept that provides for improved program accomplishments through emphasis on teamwork and interdependence in achieving quality results on a statewide basis. State offices must provide definitive program planning, systems coordination, and organizational flexibility to meet new and growing demands placed on the Bureau, such as those resulting from increased concern with the environment.

c. District Offices (Exhibit D)

The district offices of the BLM are located within state office jurisdictional boundaries. The number of locations of district offices depend on the volume of land and operational complexities within the state office boundaries.

The primary purpose of a district is to administer those Federal lands and resources within a specific geographic area which are under the overall jurisdiction of the Bureau's state office. The lands and resources of the district are administered under the multiple-use concept, as defined in the legislative authorities for their administration.

A district is the primary administrative subdivision of a state office's geographic area of responsibility. It is a geographic area comprising

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-- economic and sociological needs of the area.

- (3) Provide management control information to the Washington Office in the form of accomplishment reports, situational analyses, and information statements.
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A district is the primary administrative subdivision of a state office's geographic area of responsibility. It is a geographic area comprising

at least two resource areas (typically three to four resource areas) under the jurisdiction of the district office.

In addition to the operational levels designated above, the Bureau maintains the following special field offices:

- o Service Center Office, Denver
- o Outer Continental Shelf Office
- o Communications Electronics Center

3. General Policy Statement

In order to provide long-term program-wide guidance, the BLM has established a general policy statement covering the Bureau's function (responsibilities), major objectives, and management principles.

a. Bureau Responsibilities

In accordance with authority and direction from Federal legislation, the President and the Secretary of Interior, the Bureau of Land Management is given the responsibility for three general areas of concern: administration and disposition of public land; administration of energy and mineral resources; and resource management and protection. Specifically, the Bureau is responsible for the following*:

- (1) Classification of the public lands for orderly use and development through multiple use management or disposition.
- (2) Management, development and protection of the public lands for domestic livestock grazing, fish and wildlife development and utilization, industrial development, mineral production, wilderness preservation and preservation of public values, including environmental values.
- (3) Disposition of public lands for urban or suburban, State and local public programs, and residential, commercial, agricultural, and industrial growth or development purposes.
- (4) Provision of nationwide Federal land cadastral survey services and maintenance of a nationwide public domain land record system.

*BLM Manual, Section 1602.

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- (3) Disposition of public lands for urban or suburban, State and local public purposes, and residential, commercial, agricultural, and industrial growth or development purposes.
- (4) Provision of nationwide Federal land cadastral survey system and maintenance of a nationwide public domain land record system.

- (5) Administration of mineral and energy resources of the Outer Continental Shelf, and for coordinating their development with other marine resources.
- (6) Administration of energy and mineral resources on acquired lands and lands where surface has been patented and one or more minerals reserved.

b. Bureau Objectives

To accomplish its given responsibilities in a manner which provides maximum benefit for the general public, the BLM has set forth the following objectives*:

- (1) Protect the lands, resources, environment and public values therein from avoidable destruction, abuse and deterioration, and correct past abuses to the extent feasible.
- (2) Manage, develop and dispose of public lands and resources to maintain a quality environment, to help meet the people's need for the lands and their resources, and to contribute to the stability and orderly growth of dependent users, industries, communities and regions.

c. Bureau Management Principles

In order to meet the aforementioned Bureau responsibilities and objectives, the BLM functions under three major managerial systems, which are the Planning System, Program and Financial Management System and Inspection and Evaluation System. As overall guidelines which the Bureau follows in its planning and programs, the BLM has established the following management principles**.

- (1) Protection and Enhancement of Environmental Quality. The Bureau, in deciding among alternative uses of available resources, will utilize both physical and social data in evaluating the immediate and long-range impact of proposed actions on environmental quality and ecological balance.
- (2) Multiple Use. The Bureau will strive for a combination of resource use of the public lands that will, over the long time span, best meet its stated objectives.
- (3) Public Review. The Bureau will obtain public review and advice in evaluating alternatives available in its planning, decision making, and management.
- (4) Equal Opportunity. Bureau procedures will give all qualified citizens an equal opportunity to use public lands and their resource and will guard against monopoly of public land resources.

*BLM Manual, Section 1602.12

**BLM Manual, Section 1602.13

- (5) Administration of mineral and energy resources of the Outer Continental Shelf, and for coordinating their development with other marine resources.
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To accomplish the given responsibilities in a manner which provides maximum benefit for the general public, the BLM has set forth the following objectives:

- (1) Protect the lands, resources, environment and public values from avoidable destruction, abuse and deterioration, and correct past abuses to the extent feasible.
- (2) Manage, develop and dispose of public lands and resources to maintain a quality environment, to help meet the people's need for the lands and their resources, and to contribute to the stability and orderly growth of dependent users, industries, communities and regions.

c. Bureau Management Principles

In order to meet the aforementioned Bureau responsibilities and objectives, the BLM functions under three major managerial systems, which are the Planning System, Program and Financial Management System and Inspection and Evaluation System. An overall guidelines which the Bureau follows in its planning and programs, the BLM has established the following management principles:

- (1) Protection and Enhancement of Environmental Quality. The Bureau, in deciding among alternative uses of available resources, will utilize both physical and social data in evaluating the immediate and long-range impact of proposed actions on environmental quality and ecological balance.
- (2) Multiple Use. The Bureau will strive for a combination of resource use of the public lands that will, over the long time span, best meet its stated objectives.
- (3) Public Review. The Bureau will obtain public review and advice in evaluating alternatives available in its planning, decision making, and management.
- (4) Equal Opportunity. Bureau procedures will give all qualified citizens an equal opportunity to use public lands and their resources and will guard against monopoly of public land resources.

- (5) Financial Returns from the Public Lands. Within the framework of applicable laws and Department policy, the Bureau will obtain a fair return for the lands and for goods and services derived from the public lands, and will make these goods and services available to the public at prevailing prices.
- (6) Interagency Coordination. The Bureau will coordinate with agencies at all levels of Government whose programs affect or are affected by the administration of lands. Coordination will be directed toward achieving harmony among the various programs concerned.
- (7) Employee and Organization Development. The Bureau will continually evaluate and improve its employees, organization and operating systems to insure that they are adequate for assigned tasks.
- (8) Recognition of New Public Land Uses. The Bureau will be responsive to emerging and unforeseen public land uses. It will propose legislation and regulations to the Department and develop procedures needed to insure orderly administration of new uses, protection of public values, and coordination with existing uses.

The Planning process is subdivided into two major subprocesses, which must operate in coordination. These two processes are Land Use and Development Planning (LUDP) and Program Planning. Prescribed as current policy guidelines, descriptions, and constraints, LUDP is the process of planning which requires the management, development and usage of an area of land and the resources therein. Inherent in LUDP are two levels of plans:

- a. Management Framework Plans are prepared for planning units, to reconcile major land use objectives and conflicts and to apply direction, objectives and constraints for each resource and program activity within a specific geographical area, and
- b. Program Activity Plans are then prepared for each activity's individual resource unit (e.g., range allotments and watersheds) to lay out, in detail, how each activity will achieve the objectives and constraints shown in the management framework plan.

Management Framework plans and activity plans are sufficiently specific in terms of defined land areas, actions planned, and required action sequences.

(5) Financial Returns from the Public Lands. Within the framework of applicable laws and Department policy, the Bureau will obtain a fair return for the lands and for goods and services derived from the public lands, and will make these goods and services available to the public at prevailing prices.

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B. PLANNING SYSTEM

1. General

Of the three major BLM managerial systems, this report primarily concerns and addresses the Planning System, specifically its operation and the decision-making processes involved. The Bureau has designed its Planning System as an internal management tool to help blend diverse authorities and land use objectives and opportunities. The stated objectives of this system are:

- a. to permit informed and objective multiple use decisions through identification and reconciliation of conflicting land and resource uses in advance of the on-the-ground action with comparable information available for all resources, and
- b. to help insure that land and resource use, development and management plans and program decisions are responsive to Congressional, Departmental and Bureau objectives.*

The Planning process is subdivided into two major subprocesses, which must operate in coordination. These two processes are Land Use and Development Planning (LUDP) and Program Planning. Premised on current policy guidelines, assumptions, and constraints, LUDP is the process of planning which explains the management, development and usage of an area of land and the resources therein. Inherent in LUDP are two levels of plans:

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*BLM Manual, Section 1601.02

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1. General

B. PLANNING SYSTEM

to guide ongoing management and development actions. They do not contain specific cost estimates and calendar-type schedules, since this detail is added during the program planning process. The planning horizon is as far as can be visualized into the future and need not be precise.

The second subprocess, Program Planning, involves assembling information on potential program costs, estimated results, needs, and alternatives, and reaching decisions on desired short- and long-term program dimensions. Potential programs are based on and constrained by plans set forth through the land use and development planning process described above. Program plans are specific for identified organizational units in terms of calendar years, dollars, man-months, and units of accomplishment planned, and have specific short- and long-range planning horizons.

In order to provide a categorization for guidance statements, inventory findings, planning and management recommendations and for funding purposes, the Bureau defines and promulgates program activities throughout its Planning System. The identification and narrative definitions of the Program Activities are as follows:

a. RESOURCE PROGRAM ACTIVITIES

- (1) LANDS. Includes: inventory, analysis and classification of public lands for disposition to non-federal ownership or retention for multiple use management in Federal, State, local and private programs and basic land office record maintenance and related public service.
- (2) MINERALS & ENERGY. Involves: the evaluation and management of energy and minerals resources under BLM administration; the leasing, sale or free use disposition of mineral commodities and coordination of exploration and mining activities with surface resource values.
- (3) RECREATION. Includes: evaluation, development and management of recreation, historical and archaeological resources and users; planning, constructing, operating, and maintaining recreation facilities; interpreting the public lands and their resources to the visitor; preserving natural, historic and archaeological values; protecting the resource from recreation overuse and deterioration; improving the natural appearance of

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the public lands protecting visitors and their property from hazards when using the public lands for recreation purposes; protecting the public lands from unauthorized recreation use; and otherwise making the public land resources available for public recreation enjoyment.

- (4) WILDLIFE. Includes: the inventory, analysis, planning, development, management and studies of public land wildlife habitat resources including fish, migratory birds and rare and endangered species; those activities needed to make the resource available for public or commercial use.
- (5) WATERSHED. Includes: the study and evaluation of soil, vegetation and climatic conditions from the hydrologic standpoint, installation and management, and maintenance of watershed practices and structures specifically designed to stabilize the soil, control silt, modify water quality and/or yield, and avoid on-site and off-site erosion or water damage; encompasses all actions primarily conducted for the purpose of providing for soil stabilization and/or water runoff control including fire rehabilitation work.
- (6) TIMBER. Includes: planning, evaluation, management, utilization, protection, and development of BLM's timber resources in Western Oregon and on the public domain.
- (7) LIVESTOCK FORAGE. Includes: the study and evaluation of the rangeland livestock forage resources involving factors of soil, vegetation and climatic conditions; the management, utilization and development of the rangeland resource through implementation and maintenance of allotment management plans, manipulation of livestock grazing to provide desired plant cover for livestock forage, wildlife habitat and watershed protection; the protection of the vegetative resources from pests and disease and investments to produce additional livestock forage.

b. SUPPORT PROGRAM ACTIVITIES

- (1) CADASTRAL SURVEY. Involves: the creation and re-establishment of land boundaries. It includes preparation of field note records of monuments set, measurements made, and the resulting legal descriptive instrument--the plat; Cadastral survey is accomplished for agencies outside Interior such as the Forest Service.
- (2) FIRE PROTECTION AND REHABILITATION. Includes: prevention, presuppression and suppression of wildfire and rehabilitation of damages caused by wildfire.
- (3) ROAD AND TRAIL CONSTRUCTION AND MAINTENANCE. Includes: survey and design, easement acquisition, construction and maintenance of all roads and trails built or maintained by the Bureau.

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tenance of all roads and trails built or maintained by the Bureau.

- (4) BUILDING AND YARDS CONSTRUCTION AND MAINTENANCE. Includes the construction and maintenance of BLM-owned administration buildings and yards. It is planned through the Land Services, Forage and Timber Category, General Support Subcategory, and General Purpose facilities and equipment element.
- (5) GENERAL ADMINISTRATION. Includes general administrative support for Bureau programs including activities such as financial and personnel management, management analysis, procurement and property management, and data processing. This activity is planned through the General Support subcategory and Executive Direction and Administrative Support elements in the various PPBS categories involved.

In addition to narrative definitions, Program Activity definitions are expressed through correlation with (1) Directive System Subject Function Classification, (2) Budget Structure, and (3) Department Planning Programming Budgeting System Structure (PPBS). These definitions establish the linkage between the Department PPB Structure and the Budget subactivity structure.

BLM Plate 1 diagrams the major planning components involved in the Multiple Use Management of the BLM Planning System. Subsequent sections of this report discuss these components by describing their operational sequences and resultant interrelationships.

2. PLANNING-RELATED POLICIES AND DOCUMENTS FOR GUIDANCE

In addition to Bureau-wide policy guidance set forth in the General Policy Statement, the BLM has established Planning Assumptions, Program Standards (for selected program-wide items), Program Activity Policy Statements, Land Use Decision Criteria, District Land Use Guides, Program Outlook Guide, Economic Profile, and the Management Environmental Analysis. Currently, the Bureau is preparing Program Decision Criteria and District Program Guides.

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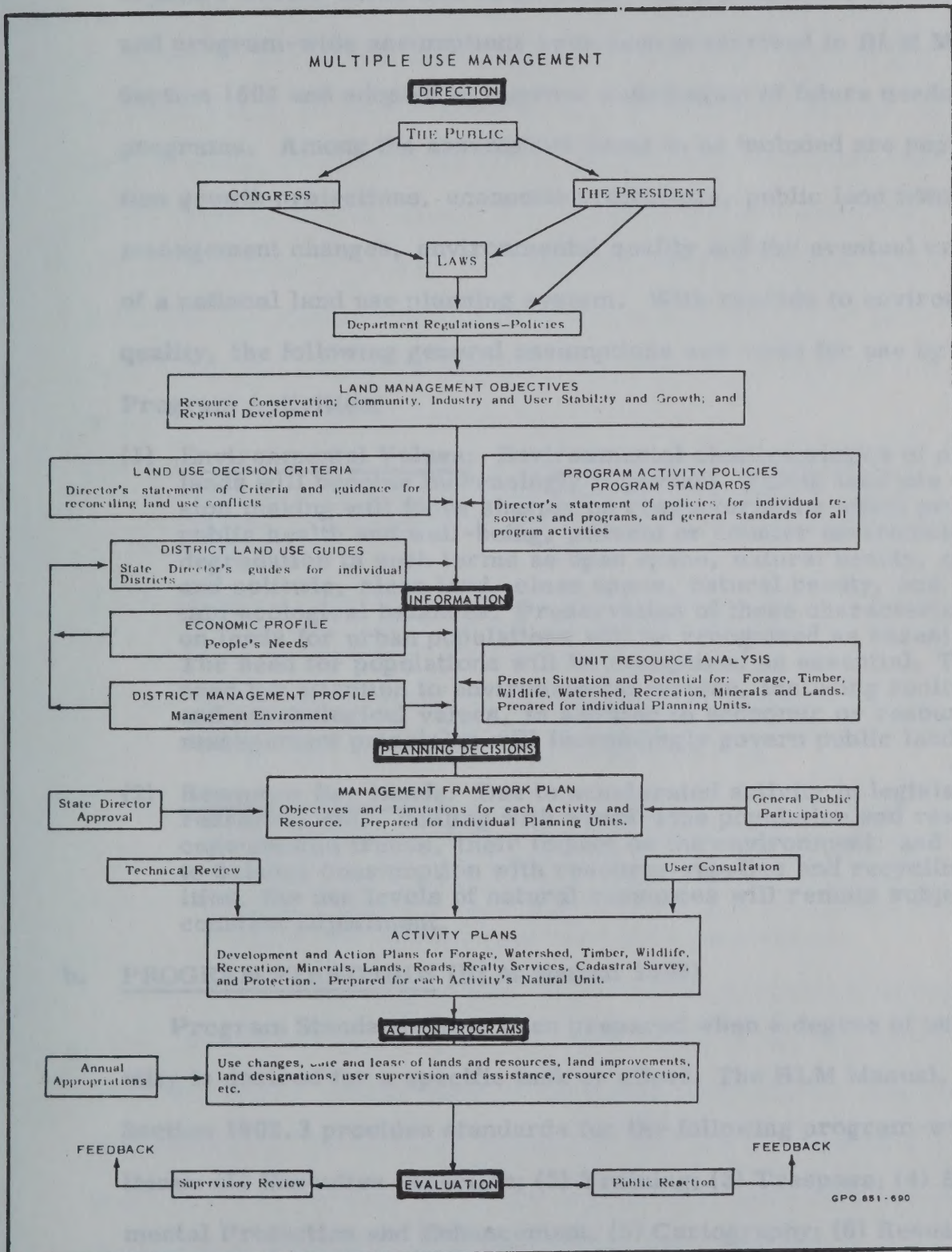
(5) GENERAL ADMINISTRATION. Includes general administrative support for BLM programs including activities such as financial and personnel management, management analysis, procurement and property management, and data processing. This activity is planned through the General Support Sub-category and Executive Director and Administrative Support elements in the various FRS categories involved.

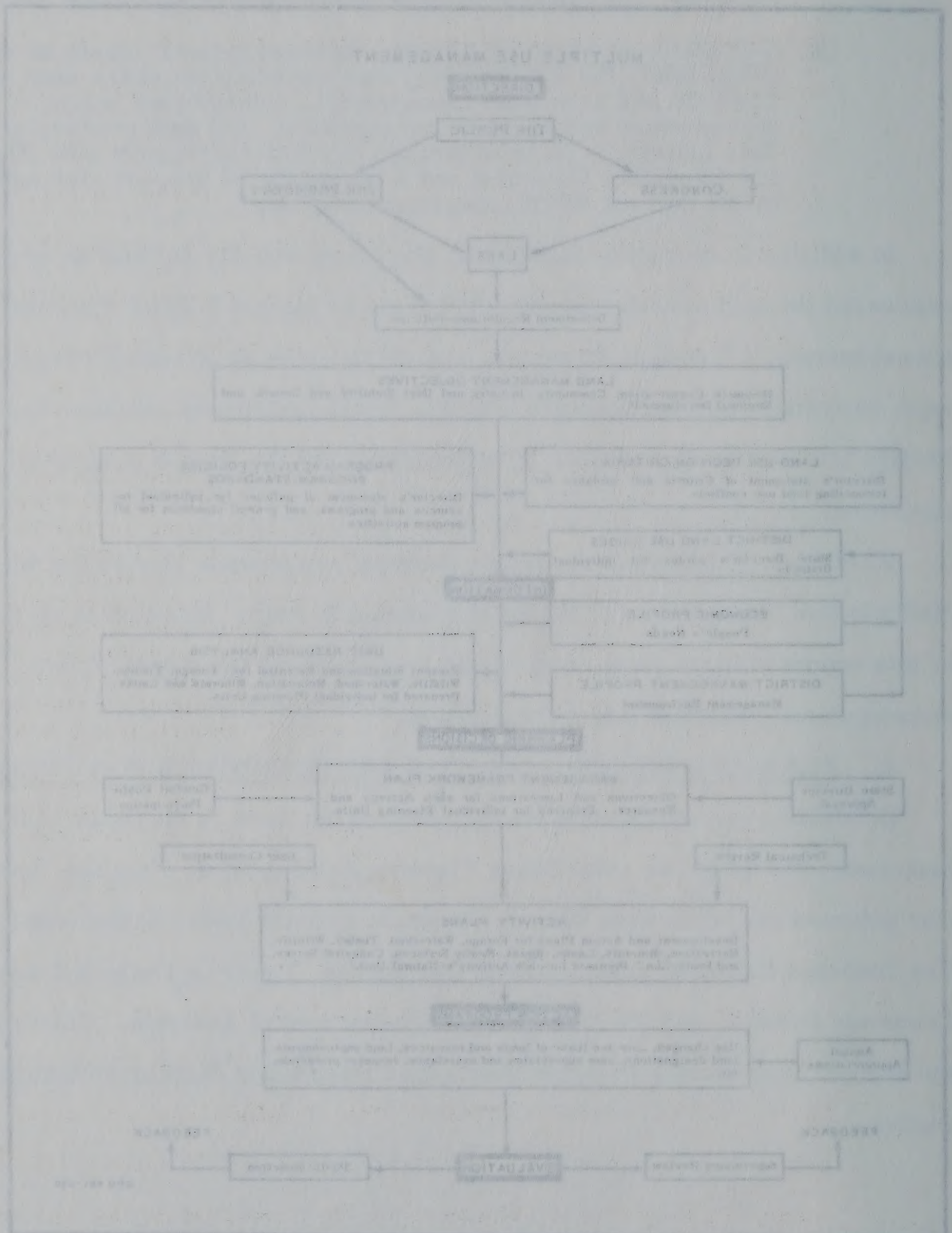
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a. PLANNING ASSUMPTIONS (BLM Manual 1602)

To standardize the planning framework in field offices with regard to future events which will affect public lands programs, Bureau-wide and program-wide assumptions have been prescribed in BLM Manual, Section 1602 and adopted to improve anticipation of future needs and programs. Among the assumptive items to be included are population growth projections, economic projections, public land tenure and management changes, environmental quality and the eventual creation of a national land use planning system. With regards to environmental quality, the following general assumptions are made for use by all Program Activities:

- (1) Environmental Values: Environmental characteristics of public lands will become increasingly important. Public land use decision making will focus sharply on characteristics which promote public health and well-being, prevent or counter environmental degradation in such terms as open space, natural beauty, quiet and solitude, clean land, clean space, natural beauty, and maintain ecological balances. Preservation of these characteristics on lands for urban populations will be recognized as essential. The need for populations will be recognized as essential. The need for attention to environmental factors, including sociological and psychological values, in addition to economic or resource management principles will increasingly govern public land use.
- (2) Resource Use Lands: Due to accelerated activity in legislation, research, etc., dealing with world-wide population and resource consumption trends, their impact on the environment, and the need to balance consumption with resource supplies and recycling capabilities, the use levels of natural resources will remain subject to constant adjustment.

b. PROGRAM STANDARDS (BLM Manual 1602)

Program Standards have been prepared when a degree of uniformity is desired for a specific task or effort. The BLM Manual, Section 1602.3 provides standards for the following program-wide items: (1) Executive Direction; (2) Training; (3) Trespass; (4) Environmental Protection and Enhancement; (5) Cartography; (6) Research

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PROGRAM STANDARDS (BLM Manual 1603)

Program Standards have been prepared when a degree of uniformity is desired for a specific task or effort. The BLM Manual Section 1603 provides standards for the following program-wide items: (1) Executive Direction; (2) Training; (3) Research; (4) Environmental Protection and Enhancement; (5) Cartography; (6) Research

and Development; (7) Safety for Bureau Employees; (8) Protection of Public From Hazards; and (9) Interagency Land and Resource Adjustments.

With respect to Environmental Protection and Enhancement, the BLM Manual states that all Bureau activities are involved in and concerned with environmental protection and enhancement, in its largest sense, which includes (1) the preservation and enhancement of open space, natural beauty, rare and endangered ecosystems, and ecological harmony, and (2) the prevention of air pollution, water pollution, pollution by noise, land pollution by solid wastes and destruction and damage by wildfire. The Bureau, therefore, has prescribed the following standards:

- (1) All land use and program decisions must be consistent with Federal or State air and water quality standards and public health and safety standards affecting solid waste disposal and noise abatement.
- (2) Open space, natural beauty, clean air, clean water, ecological, and ecosystem values and potentials are fully considered in all land use and program decisions.
 - a. When these values can be preserved or enhanced, at no cost, simply through careful design and execution of Bureau programs, they are preserved or enhanced.
 - b. When the preservation or enhancement of these values will result in loss of other resource values or increase in program costs, the long range cost is compared to the long range results. Consideration is given to social as well as economic values. Great weight is given to preservation of a wholesome environment for future generations.

The aforementioned standards apply to each Program activity, which, in addition encourages public awareness of environmental values, litter abatement, rehabilitation of impaired environments, enhancement of environments by improved technology, and use of adequate stipulations in all licenses, permits and grants to prevent deterioration that may be caused by improper use of land resources.

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c. PROGRAM ACTIVITY POLICY STATEMENTS (BLM Manual 1603)

Program Activity definitions and Policy Statements are prepared by the Director's Office for use throughout the Bureau. Each Program Activity has a major mission or purpose for which policy in the form of objectives, standards and other required guidance can be specified. Program Activity Policy Statements provide a description of the program activity, a listing of legal authorities and statutes, long-term objectives, assumptions, major principles and standards, and long-term priorities. Since these statements, if fully implemented on a specific area of land, may often conflict, the State Directors and District Managers have been delegated the responsibility of reconciling these conflicts in the preparation of Management Framework Plans (MFP) and with guidance from Land Use Decision Criteria.

d. LAND USE DECISION CRITERIA (BLM Manual 1603)

Since the application of the foregoing Program Activity Policy Statements may often result in conflicts among activities within specific geographical areas, the BLM has specified Land Use Decision Criteria which are consistent with the Bureau's General Policy Statement. With regards to decision criteria, the BLM has issued the following guidelines to help keep the choices (from among alternative and competing land uses) consistent with national policy and the public interest and consistent from area to area and time to time:

- (1) Take into account the following major requirements of the National Environmental Policy Act of 1969.
 - (a) In all planning decision making, use a systematic, interdisciplinary approach to ensure that due consideration is given to the impacts on man's environment.
 - (b) Attain the widest range of beneficial uses of the environment without environmental degradation and without risk to health or safety.

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- (b) Attain the widest range of beneficial uses of the environment without environmental degradation and without risk to health or safety.

- (c) Enhance the quality of renewable resources, and conserve and recycle non-renewable resources to the greatest extent possible.
 - (d) Where a proposed action would have a significant impact on the human environment, evaluate the proposed legislation or action in terms of appropriate alternatives to the proposed action. The environmental impact of individual actions which forms part of a greater project or program with a cumulatively significant impact should be evaluated. For each alternative, describes environmental impacts and unavoidable adverse environmental effects, effects on resource needs and availability on a short-term versus long-term basis, and irreversible resource commitments involved.
- (2) Make sure that all available alternatives have been identified, studied, developed and described, and that all opportunities to reconcile the conflict through coordination have been exhausted.
 - (3) Make sure that the advantages and disadvantages of each alternatives are adequately described to provide a sound basis for judgement and decision.
 - (4) Make sure that public review, including cooperation with appropriate local, state, regional and Federal agencies is accomplished to the extent necessary to understand all opinion on the alternatives available.
 - (5) Consider the advantages and disadvantages of each alternative in relation to the Bureau's objectives. To do this, consider the following questions when evaluating advantages and disadvantages. All questions will not be applicable to individual conflict situations.
 - (a) Which alternative will best contribute to a quality environment? What environmental values--aesthetic, cultural, sociological, psychological, ecological, and health values--are involved? What alternative distrubs these values the least? What alternative enhances diversity and variety for individual choice?
 - (b) Which alternative will best contribute to a balanced and productive ecology? Are there existing problems of ecological imbalance? Have all the foreseeable ecological implications been anticipated?
 - (c) Which alternative will best protect the lands and resources from avoidable abuse and/or deterioration? What loss of present or future productive capacity will be avoided--or caused? Has there been adequate consideration to the use of renewable resources? Is the quality of a renewable resource enhanced? Have maximum opportunities for recycling a non-renewable resource been evaluated?

- (c) Enhance the quality of renewable resources, and conserve and recycle non-renewable resources to the greatest extent possible.
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- (c) Which alternative will best protect the lands and resources from avoidable abuse and/or deterioration? What loss of present or future productive capacity will be avoided or caused? Has there been adequate consideration to the use of renewable resources? Is the quality of a renewable resource enhanced? Have maximum opportunities for recycling a non-renewable resource been evaluated?

Are beneficial advanced technologies utilized, and detrimental practices curtailed? Which alternative is the least expensive per unit of loss avoided?

- (d) Which alternative will best meet some defined need of the people, present and future, for the lands or their resources? What needs will be met? How were they specified? Is the standard of consumption reflected by these justified in terms of the resources required? How do current resource demands relate to long-range resource requirements? What proportion of the present unmet need is involved in the subject alternative: What would happen if the needs were not met on public lands? What alternative is least expensive per unit of need met?
- (e) Which alternative will best foster stable and orderly growth of dependent users and industries? What user and industry groups are involved? How many existing and potential jobs are involved? How dependent are the users and industries on public land--as opposed to other components of their operations? Are any of the alternatives critical to survival of a particular segment of industry or group of users? What would happen if the user or industry needs involved are not met?
- (f) What alternative will best foster stable and orderly growth of dependent communities? How dependent is the community on BLM administered lands? Is the community now growing or declining in population and size of economy? How critical are the alternatives to the community's economic and social well-being--in other words, what would happen if the community needs involved are not met? How concerned are the community spokesmen?
- (g) What alternative will best foster an outdoor community for dependent population centers? How dependent is the community on the related outdoor areas? Are there alternative areas available?
- (h) Which alternative will contribute most to regional growth? Is there a demand or market for the resource production involved? Would the growth generated be short lived or stable? Which alternative creates the best chain of secondary benefits? Is the region now socially and economically growing at least at the national average? Is the region, or segment of it, depressed? What would happen if the regional growth associated with the various alternatives is not realized? Which alternative is least expensive in terms of growth generated:

e. DISTRICT LAND USE GUIDES (BLM Manual 1603)

To supplement and interpret Bureau wide guidance set forth in BLM Manual, Sections 1602 and 1603, District Land

Are beneficial advanced technologies utilized, and detrimental practices curtailed? Which alternative is the least expensive per unit of loss avoided?

(d) Which alternative will best meet some defined need of the people, present and future, for the lands or their resources? What needs will be met? How were they specified? Is the standard of consumption reflected by these justified in terms of the resources required? How do current resource demands relate to long-range resource requirements? What proportion of the present need is involved in the project alternative? What would happen if the needs were not met on public lands? What alternative is least expensive per unit of need met?

(e) Which alternative will best foster stable and orderly growth of dependent users and industries? What user and industry groups are involved? How many existing and potential jobs are involved? How dependent are the users and industries on public land—as opposed to other components of their operations? Are any of the alternatives critical to survival of a particular segment of industry or group of users? What would happen if the user of industry needs involved are not met?

(f) Which alternative will best foster stable and orderly growth of dependent communities? How dependent is the community on BLM administered lands? Is the community now growing or declining in population and size of economy? How critical are the alternatives to the community's economic and social well-being in other words, what would happen if the community needs involved are not met? How concerned are the community spokesmen?

(g) Which alternative will best foster an outdoor community for dependent population centers? How dependent is the community on the related outdoor areas? Are there alternative areas available?

(h) Which alternative will contribute most to regional growth? Is there a demand or market for the resource production involved? Would the growth generated be short lived or stable? Which alternative creates the best chain of secondary benefits? Is the region now healthy and economically growing at least at the national average? Is the region, or segment of it, depressed? What would happen if the regional growth associated with the various alternatives is not realized? Which alternative is least expensive in terms of growth generated?

e. DISTRICT LAND-USE GUIDES (BLM Manual 1002)

To supplement and interpret Bureau wide guidelines set forth in BLM Manual, Sections 1002 and 1003, District Land

use guides are prepared by the State Directors. These guides contain sufficient guidance to insure the State Director that his policies and programs for the Districts will be realized in the managers' multiple use and resource planning decisions. They do not deal with or prescribe program implementation priorities. The District Land Use guides must contain 3 major classes of guidance:

- (1) Interpretation or Application of Director's Guidance. This may involve all or part of the General Policy Statement, Planning Assumptions, Standards for Selected Program-Wide Plans, Program Activity and Policy Statements, or Land Use Decision Criteria. The interpretation or application should make reference to or be keyed back to the Director's statements.
- (2) Criteria or Guidelines for Specific Types of Land Use Conflicts. State Directors may wish to insure criteria or guidelines for conflict solutions more specific than the Director's Land Use Decision Criteria (1603.2). An example might be certain output values or weights to use, or a certain base level to maintain.
- (3) Guidelines for Inter-District Situations. In many instances a land or resource supply may exist in one District and the demand in another, or a particular land use arrangement must be coordinated between Districts.

f. PROGRAM OUTLOOK GUIDE (BLM Manual 1603)

The Program Outlook Guide indicates the Director's assessment of the future goals and programs for the next 5 years. Developed in two parts, the first establishes policy and budget outlook and determines priority items of concern to the Director and the Department while the second outlines 5-year goals for each program activity by order of importance in response to the defined priorities. Included in the overview is a discussion of budget outlook and the listing of items for special attention which furnish added direction for program activities.

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- (2) Criteria or Guidelines for Specific Types of Land Use. District State Directors may wish to insure criteria or guidelines for conflict situations more specific than the Director's Land Use Decision Criteria (1993, p. 2). An example might be certain output values or weights to use, or a certain base level to maintain.
- (3) Guidelines for Inter-District Situations. In many instances a land or resource supply may exist in one District and the demand in another, or a particular land use arrangement must be coordinated between Districts.

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g. Economic Profile (BLM Manual 1606)

The objective of the Economic Profile is to insure that State Directors and District Managers have available, when making planning and program decisions, data relating to the nature, amount and incidence of economic benefits resulting from the present use of public lands and analysis and projection of the future supply, demand and need for public lands and resources. The Economic Profile consists of two components.

The first component, State Economic Profile, describes the present and projected structure of the State Economy, examines the geographic correlation of resource capabilities and needs within and outside the State, appraises Bureau opportunities for meeting present and projected resource needs at the State level, and serves as a source of economic information to the State Director for preparation of District Land Use Guides. State Directors are responsible for preparing this document.

The second component, the District Economic Supplement, provides an analytical framework for determining, at the District level, the capability of BLM resources within the District to help meet present and projected needs and thus promote general Bureau objectives. District Managers are responsible for preparing this document with assistance from the State Office staff.

h. Management Environmental Analysis (BLM Manual 1604)

The objective of the Management Environmental Analysis is to provide information on the factors, other than those relating to resource supply and demand, that must be considered for sound planning decisions. District Managers have the responsibility

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Management Environmental Analysis (BLM Manual 1804)

h.

The objective of the Management Environmental Analysis is to provide information on the factors, other than those relating to resource supply and demand, that must be considered for sound planning decisions. District Managers have the responsibility

for preparing this document, which consists of the following three components:

- (1) District Management Profile includes a description of geographical, institutional and certain other factors in the District;
- (2) District Organization Analysis provides information, characteristics and background of the district's administrative organization needed for planning and programming decisions. It includes the District Management History, which briefly relates the history of BLM Management in the district, the District Table of Organization, which briefly describes the present administrative organization, and Resource Areas which briefly explains the logic, from an administrative management standpoint, of particular groups of planning units into Resource Areas.

3. System Operations

As previously mentioned, the BLM Planning System involves two major subprocesses -- Land Use and Development Planning and Program Planning. This section presents the procedural and operational aspects involved in the overall planning by the Bureau.

a. Land Use & Development Planning (LUDP)

Given policy guidance, assumptions, and constraints, Land Use and Development Planning determines the management, development and usage of an area of land and the resources therein. This planning process can be further subdivided into two major systems -- information and management. The Information System corresponds to the Economic Profile, District Management Profile, and the Unit Resource Analysis, which is the collection and storage process for information about the land and its resources. The Management System consists of the Management Framework Plan, which is a "general" or

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"multiple use" plan designed to identify and reconcile land use and resource use conflicts, and Program Activity Plans, which evolve from the MFP and determine and record, in detail, the actions required by each Program Activity to accomplish its goals and objectives. The Multiple Land Use Plan (MFP) and its accompanying Program Activity Plans represent the major outputs of the Planning System at the District Office level.

The basis for data collection, recordation and display in planning is the Planning Unit. A typical BLM District is first divided into Resource Areas, each of which is headed by an Area Manager and is further subdivided into Planning Units (refer to BLM Plate 2). The planning unit is defined as a geographic area within a district used for assembling resource inventory data and including a group of related lands, resource and use pressure problems which demand uniform consideration. The boundaries of a planning unit are based on resources, ecosystems, economics and social factors and are adequate to include most significant interrelationships. Undue separation of natural units such as watersheds and timber stands are normally avoided in defining planning units for a land area. On occasion, there will be inter-unit relationships, such as wildlife migration, that require consideration and discussion. In order to provide data consistency, the BLM requires the coordination of data between all adjacent planning units, which may not necessarily lie within the same resource area, district or State.

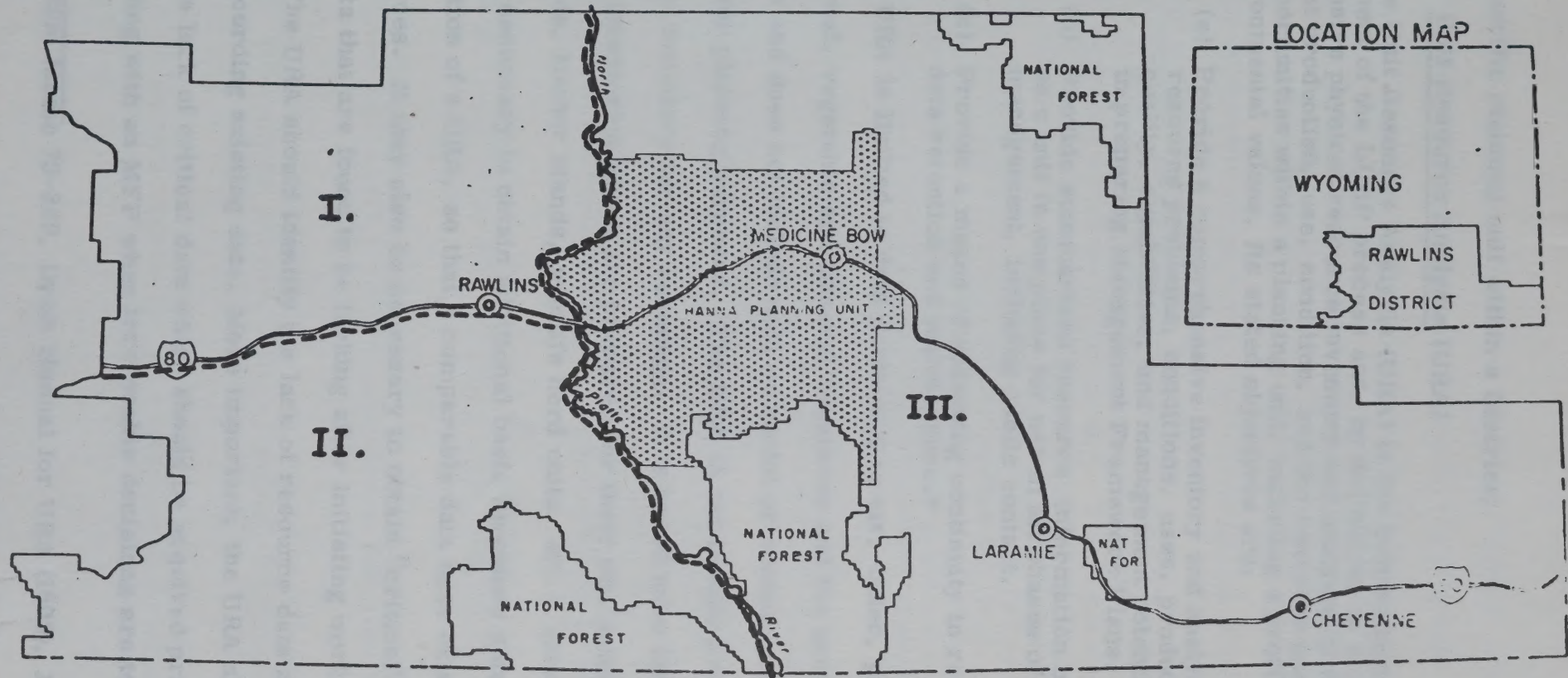
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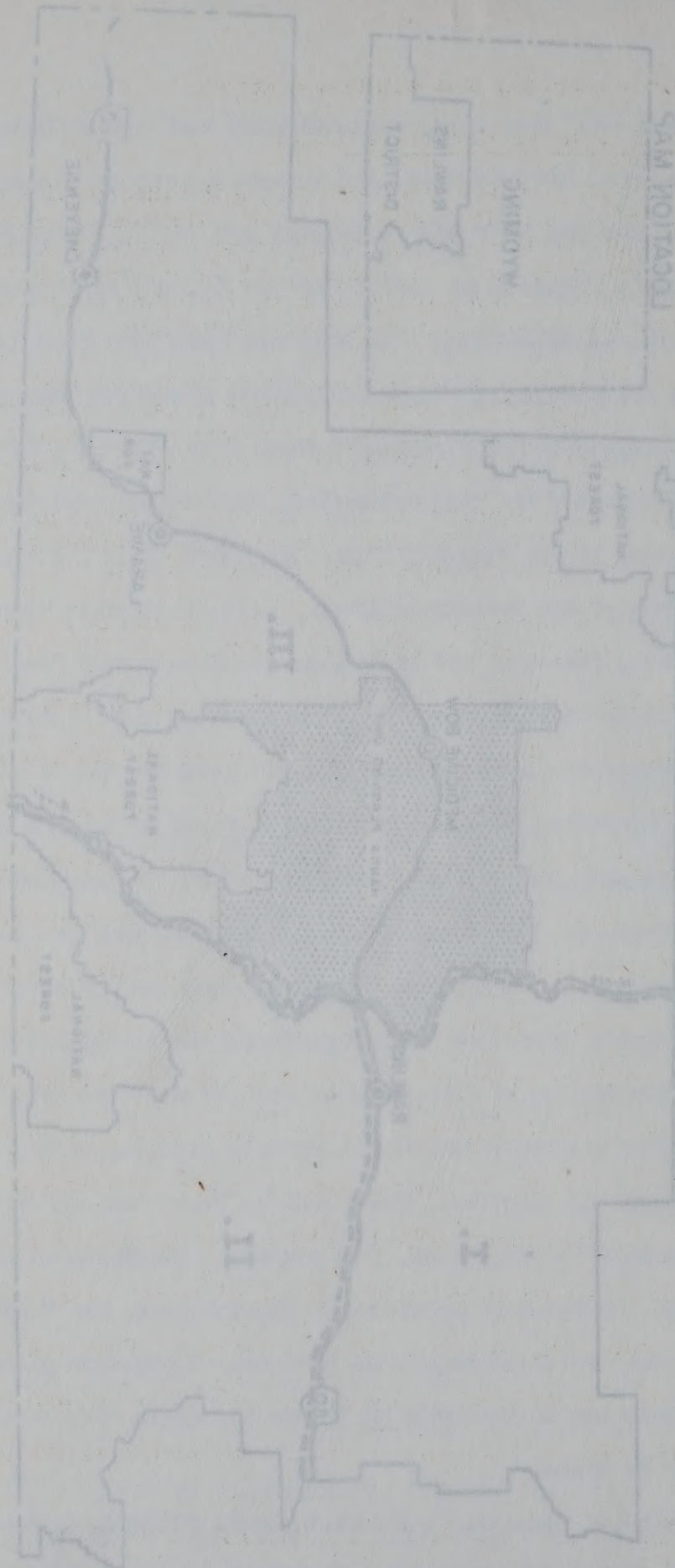
BUREAU OF LAND MANAGEMENT

RAWLINS DISTRICT, WYOMING



RESOURCE AREAS: I. Great Divide
II. Baggs
III. Medicine Bow

III. MEDICAL BOM
 II. ISLES
 RESERVE VIEWS: I. CLASH DIARY



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 DISTRICT WYVING

a specific planning unit within a District.

(1) Unit Resource Analysis (URA)

The Unit Resource Analysis (URA) is the information component of the LUDP process and, by definition, is a comprehensive physical resource inventory and analysis of the current production, use, condition, and the resource potential and opportunities within a planning unit, including a profile of environmental values. Its stated objectives are:

- (a) Provide a comprehensive inventory and analysis of resource problems, conditions, uses, production, quality, capabilities, and management potential for use in preparing Management Framework Plans.
- (b) Provide summarized resource information of all types on a unit in one place for use in all phases of resource management, including public contact.
- (c) Provide a means of achieving continuity in resource data retention and maintenance.*

The URA is limited to data pertaining to air, water, physical land, animal, vegetable and mineral resources and the use of these resources and does not include data on social or economic factors required for planning purposes. The URA is not intended to be an original inventory for any resource. It is based upon existing resource inventories which are prepared for their own natural units (watersheds, timber stands, wildlife herd units, etc.). However, it may be necessary to obtain additional basic inventory data prior to completion of a URA, so that a comparable data base exists for all resources. It may also be necessary to obtain "critical" resource data that are found to be lacking after initiating work on a URA. The URA should identify the lack of resource data as well as recording existing data. More important, the URA should identify the lack of critical data which should be acquired prior to proceeding with an MFP when irrevocable decisions are to be

*BLM Instruction Memo 73-269, Draft Manual for URA (1605), July 5, 1973.

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(i) Unit Resource Analysis (URA)

a specific planning unit within a District.

made. It is not necessary or desirable to limit the data to written data sources. Personal knowledge of all resource managers and major users should also be utilized and documented as to source. Finally, the URA is not a plan of operation and does not include decisions to implement specific resource actions.

The URA is accomplished through the following four steps:

URA Step 1 - Develop a Suitable Base Map.

The Planning System includes the practice of relating information on physical land and mineral resources directly to actual physical locations within the planning unit. The Base Map is the initial reference map showing the cadastral survey grid, land status (withdrawn, recent public land, etc.), existing roads, trails, railroads, airports, towns and any other major physical improvement such as reservoirs, dams and irrigation systems. Data for the planning unit are assembled both in narrative form and on transparent sheets called "overlays." When placed over the Base Map, these overlays display the distribution of physical and biological resources in the planning unit.

The base Map is prepared by district office personnel with guidance from the responsible Area Manager for the planning unit.

URA Step 2 - Prepare a Physical Profile.

The Physical Profile is a description of the basic physical characteristics of the unit, displayed in a fashion facilitating their consideration in the analysis of resource and environmental factors. The profile covers all lands in the planning unit, regardless of land ownership or jurisdiction. Data are assembled in both narratives and overlays for the following physical characteristics:

- o Climate data include information on precipitation, temperatures, wind, frost-free growing season, and the limiting effects of climate.
- o Topography data include general relief of the planning unit, mountain and valley structure, elevational differences, drainage patterns, and general gradients.
- o Hydrology data include all water resources in the planning unit: the location of live streams, springs, reservoirs, wells, and the extent of groundwater supplies if known.
- o Vegetation data include the major types of vegetation in the planning unit, the extent of coverage, and locations. Variations due to elevational differences or exposure are described.

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- o Vegetation data include the major types of vegetation in the planning unit, the extent of coverage, and locations. Variations due to elevational differences or exposure are described.

- o Soils data include soil associations, and -- to the extent it is available -- such information as parent material, depth, fertility, texture, structure, case of revegetation, and erodability.
- o Geology data are confined to the general surface characteristics of the planning unit, identifying those certain characteristics that may be of particular importance to the management of the planning unit.
- o Animals data include the distribution of various animal species, habitat areas for major species, locations of rare and endangered species, and important migration routes and concentration areas (kidding grounds, spawning areas, nesting areas, etc.)
- o Fire data include fire occurrence analysis, fire behavior analysis, identification of resource values at risk, and completed fuel breaks and firebreaks.
- o Limiting Physical Factors data concern physical factors which have a limiting effect on resource use or potential development. These factors, which affect more than one resource, include the Limiting Vegetable-Soil Factor (LVSF); erosion susceptibility; earthquake faulting; areas of periodic or potential severe and destructive flooding; landslide, avalanche, or snow cornice areas; areas with other unstable soils; hazard conditions (mining shafts, tunnels, construction excavations and gravel pits, dumps abandoned buildings, etc.); and unpleasant sound areas (airport approach zones, working mines, military test and bombing ranges, etc.).
- o Developments data pertain to all developments on BLM administered lands and those on other lands that impact or are impacted by Bureau programs. These include land treatments (seedings, vegetative manipulation through mechanical or chemical application, tree and shrub plantings, etc.), management facilities (fences, cattleguards, recreation sites, fire stations, etc.), and access (county, BLM, private and other roads).

The physical profile information is developed by the district office staff under the direction of the area manager over the planning unit. He will call on various experts from the district staff functions, as needed, to complete this step. The information is gathered from existing sources and review of the area.

URA Step 3 - Analysis and Recordation of the Present Situation.

This step involves an inventory of the resources and man's activity in the planning unit. This information is needed to understand the significance, interrelationships and problems in the area. Based on all available inventory data and information, an analysis and record (narrative and overlay) are made of the current use, problems, production, trends and quality for each of the following seven resource categories:

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Geology data are confined to the general surface characteristics of the planning unit, identifying those certain characteristics that may be of particular importance to the management of the planning unit.

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URA Step 2 - Analysis and Reevaluation of the Present Situation. This step involves an inventory of the resources and their activity in the planning unit. This information is needed to understand the significance, interrelationships and problems in the area. Based on all available inventory data and information, an analysis and record (narrative and overlay) are made of the current use, problems, production, trends and quality for each of the following seven resource categories:

- o Lands includes current land use, land ownership, and lands actions which have occurred in the planning unit.
- o Minerals and energy includes the location of mineral developments on privately owned or Federal lands, information on ownership of minerals in the planning unit, locations and types of mining claims on Federal lands, and information on oil and gas and other energy resources.
- o Timber includes the location and quantity of existing timber resources, and the amount and type of use being made of the timber resource.
- o Livestock forage depicts the livestock grazing management situation in the planning unit.
- o Watershed includes a description of the watershed conditions, including erosion, watershed improvements, and problems and needs.
- o Wildlife habitat considers species of big game, upland game, waterfowl, fish, rare and endangered wildlife, fur bearers, and nongame and other species whose habitat in the planning unit may require special management attention.
- o Recreation includes such values as scenery, wildlife, cultural features, geologic features, water bodies, snow and ice where winter sports are feasible, ecological features, recreation sites, and primitive or wilderness areas.

Resource specialists in the District Office have the primary responsibility for accomplishing Step 3.

URA Step 4 - Analysis and Recordation of all Technically Feasible Management Opportunities for Each of the Seven Resource Categories. According to the BLM, individual consideration is essential to learn the full capability and potential of each separate resource category. In this step, the Bureau prescribes the "tunnel vision" approach in which there is no concern for multiple-use considerations other than those built into basic inventorying techniques involved in URA Step 2. Each resource category (Lands, Minerals and Energy, Timber, Livestock Forage, Watershed, Wildlife Habitat and Recreation) is evaluated as if it were the only resource existing in the planning unit. District resource specialists, who are responsible for completing Step 4, address the question, what can be planned if money and time are available to do anything technically possible in the planning unit? Each specialist prepares his own resource plan in both narrative and overlay form. This single-use planning is accomplished without economic restraints and is not limited by the concept of multiple use management. Only technical constraints are imposed, since the full potential must be technically feasible for management.

not a plan

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Resource specialists in the District Office have the primary re- sponsibility for accomplishing Step 3.

Restoration includes such values as scenery, wildlife, cul- tural features, geologic features, water bodies, snow and ice where winter sports are feasible, ecological features, rec- reation sites, and primitive or wilderness areas.

Wildlife habitat considers species of big game, upland game, waterfowl, fish, rare and endangered wildlife, fur bearers, and neogame and other species whose habitat in the planning unit may require special management attention.

Watershed includes a description of the watershed condi- tion, existing erosion, watershed improvements, and problems and needs.

Livestock forage depicts the livestock grazing management situation in the planning unit.

Timber includes the location and quantity of existing timber resources, and the amount and type of use being made of the timber resource.

Minerals and energy includes the location of mineral de- velopments on privately owned or Federal lands, informa- tion on ownership of minerals in the planning unit, locations and types of mining claims on Federal lands, and information on oil and gas and other energy resources.

Lands includes current land use, land ownership, and lands sections which have occurred in the planning unit.

The URA procedures, as described above, have been fully implemented and operationalized in the field. It should be pointed out, however, that these procedures only partially represent the complete URA process, as planned by the BLM. The missing and incomplete portion of the URA is the Environmental Profile, which is currently being developed and tested in the Carson City District, Nevada.* URA Step 3 has two parts. The first part, Analysis and Recordation of the Present Situation, has been discussed above. The second part is the analysis and recordation of the present environmental quality situation as an environmental profile.

The Environmental Profile has been developed to fulfil the Bureau's responsibility to analyze, protect and enhance the quality of the environment as an entity. The Bureau makes a distinction between the resources (URA Step 3, Part 1) and the environment (URA Step 3, Part 2). Physically they are identical, but functionally they are discrete. The resource categories relate to some ultimate use, while the environment represents the place or setting for particular activities by organisms existing within communities or biomes.**

The profile is accomplished through the following steps:

URA Step 3, Part 2 -- Analysis and Recordation of the Present Environmental Quality Situation.

In this step, two major questions are addressed: how are the ecosystems functioning within portions of the planning unit, and what are the dominant environmental qualities of the various areas within the planning unit? This step entails two major portions, Ecological Factors and Human Values.

*Refer to Case Study VI: Carson City District Nevada, in Section C of this Chapter.

**BLM defines biome as "a major biotic community, that is natural groups of organisms characterized by the occurrence of certain plants and animals that are dominant or influent." A community is "a group of populations (groups of organisms of the same species) living in a prescribed area or physical habitat."

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(a) Present Situation - Ecological Factors

With data from the Physical Profile (URA-Step 2), resources inventories (URA-Step 3, Part 1) and other available sources, the ecological setting and situation are developed through a process of overlays and recorded in narrative form.

The resultant product of the overlay process is the identification and categorization of areas by the following ecological quality classes:

- o Prime Ecological Quality -- An area where the quality of all ecological elements meets a prescribed standard.
- o Stable Ecological Quality -- An area where the average quality of the ecological elements meets the prescribed standard.
- o Fragile Ecological Quality -- An area where the ecological elements do not meet prescribed standards either through natural or deteriorative causes.
- o Barren Geological Area -- An area where the ecological elements do not exist, with little or no soil or living organisms.
- o Degraded Ecological Quality -- An area where detrimental change agents have caused or will cause major deterioration of the primary ecological elements.

(b) Present Situation - Human Values

In this step, Human Values are reflected in Landscape Values. This section of the Environmental Profile focuses on aspects of the environment that exist in the human mind as quality thoughts that are apart from particular material objects. It presents a method of looking at the environment as man perceives it through his five senses of sight, smell, taste, sound, and touch, and the feelings it arouses in his mind, rather than looking at the environment as a concrete group of physical elements.

By means of the "Landscape Overlay," the Carson City District delineated the entire planning unit into landscape types or areas of dominant landscape character as seen in terms of color, texture, formline and scale and then determined and identified the present quality of each Landscape type. Since data on landscape characteristics were not available from District inventories or file data, the Carson City District conducted personal on-the-ground observations to analyze and delineate the landscape types. This analysis is recorded in narrative form.

(a) Present Situation - Ecological Factors

With data from the Physical Profile (URA-Step 2), resources inventories (URA-Step 3, Part 1) and other available sources, the ecological setting and situation are developed through a process of overlays and recorded in narrative form.

The resultant product of the overlay process is the identification and categorization of areas by the following ecological quality classes:

- o Prime Ecological Quality -- An area where the quality of all ecological elements meets a prescribed standard.
- o Stable Ecological Quality -- An area where the average quality of the ecological elements meets the prescribed standard.
- o Fragile Ecological Quality -- An area where the ecological elements do not meet prescribed standards either through natural or deteriorative causes.
- o Barren Ecological Area -- An area where the ecological elements do not exist, with little or no soil or living organisms.
- o Degraded Ecological Quality -- An area where detrimental change agents have caused or will cause major deterioration of the primary ecological elements.

(b) Present Situation - Human Values

In this step, Human Values are reflected in Landscape Values. This section of the Environmental Profile focuses on aspects of the environment that exist in the human mind as quality thoughts that are apart from particular material objects. It presents a method of looking at the environment as man perceives it through his five senses of sight, smell, taste, sound, and touch, and the feelings it arouses in his mind, rather than looking at the environment as a concrete group of physical elements.

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URA-Step 4, Part 2 - Analysis and Recordation of All Opportunities to Improve Environmental Qualities, or Stop or Delay their Degradation.

This step addresses the following questions: what can be done to protect or enhance the functioning of the ecosystems, and what modifications could be made to reinforce, protect, or delay degradation of the dominant qualities? This process identifies the technically feasible opportunities to improve, maintain, or protect the environment and communities within rated (ecological quality class) areas described in URA-Step 3, Part 2. Both Ecological Opportunities and Landscape Opportunities are developed in narrative and overlay forms.

(2) Management Framework Plan (MFP)

Completion of the URA and Environmental Profile leads to the preparation of the Management Framework Plan. By definition, the MFP is a planning decision for one or more planning units which indicates the resource values to be protected, establishes uses to be accommodated and their relative magnitude, and provides a multiple use framework into which more detailed plans (called Program Activity Plans) must fit. Its objectives are:

- (a) Provide a structured method of synthesizing specific resource programs and support activity proposals with detailed recommendations for land use management within a designated area.
- (b) With managerial approval (based on public input) of the final recommendations, the MFP will provide guidance for ongoing Bureau action programs and permit specific resource programs to proceed through more detailed planning and implementation stages.*

The MFP is a multiple land use and resource development plan designed to display how the planning unit should be managed and involves a process designed to identify and reconcile land use and resource use conflicts. Covering all resource and support activities for a specific land area, the MFP establishes land use allocations and objectives and provides a coordinating framework for successive levels of planning action. The land use or combination of uses which emerge are those which best achieve

*BLM Instruction Memo 73-38 of September 24, 1973, Draft Manual Section 1608 - Management Framework Plans.

This step addresses the following questions: what can be done to protect or enhance the functioning of the ecosystem, and what modifications could be made to reduce, protect or delay degradation of the dominant qualities? This process identifies the technically feasible opportunities to improve, maintain, or protect the environment and communities within (ecological quality class) areas described in URA-Step 3, Part 2. Both Ecological Opportunities and Landscape Opportunities are developed in narrative and overlay forms.

(3) Management Framework Plan (MFP)

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the objectives of multiple use. The widest range of beneficial uses is sought without undue environmental degradation, risk to health and safety, or other undesirable consequences. This includes optimal production of products and services from National Resource Lands consistent with acceptable environmental quality and preservation of natural values. Additionally, the MFP provides a direct guide to many forms of management action and a basis for determining proper sequence of management actions.

Currently in the field, preparation of the MFP is accomplished in three basic steps*:

MFP-Step 1 - Program Activity Recommendations.

In MFP-Step 1, information from URA-Step 4 is used by each resource specialist to design a practical plan for his resource. As in URA-Step 4, the tunnel vision approach is utilized to design a single-use plan, unaffected by multiple-use considerations. Unlike URA-Step 4, this plan must include legal, economic, time and other constraints and consider specific policy guidelines or limitations from Program Standards (BLM Manual Section 1602), Program Activity Policy Statements (BLM 1603), and District Land Use Guides (BLM 1603). The finished plan must be sufficiently practical such that if accepted, it could be put into effect in the planning unit. A set of concise written recommendations are developed and documented with supportive justification for each of the seven resource program activities (Lands, Minerals and Energy, Timber, Livestock Forage, Watershed, Wildlife Habitat and Recreation). For each resource activity, an overlay is prepared, identifying areas covered by these activity recommendations.

MFP-Step 2 - Multiple Use and Support Recommendations.

This second step involves the comparison of all program activity recommendations (generated in MFP-Step 1) for the planning unit; analysis of alternative solutions to resource conflicts; preparation of a set of multiple use recommendations for resolving (or minimizing) resource conflicts or coordinating resource overlaps which do not conflict; and identification of support recommendations necessary to carry out the multiple use recommendations. Policy guidance for considering overlaps or conflicts between activity recommendations is provided in Land Use Decision Criteria, as supplemented by District Land Use Guides (BLM 1603).

The "adversary concept" is the basis of MFP-Step 2. In the previous step, each resource specialist has developed the

*BLM Manual, Section 1608 - Land Use and Development Planning, 1608.06.c, 1 through 4.

the objectives of multiple use. The widest range of beneficial uses is sought without undue environmental degradation, risk to health and safety, or other undesirable consequences. This includes optimal production of products and services from National Resource Lands consistent with acceptable environmental quality and preservation of natural values. Additionally, the MUP provides a direct guide to many forms of management action and a basis for determining proper sequence of management actions.

Currently in the field, preparation of the MUP is accomplished in three basic steps:

MUP-Step 1 - Program Activity Recommendations.

In MUP-Step 1, information from URA-Step 4 is used by each resource specialist to design a practical plan for his resource. As in URA-Step 4, the fundamental vision approach is limited to 55-75% of a single-use plan, unaffected by multiple-use considerations. Unlike URA-Step 4, this plan must include legal, economic, time, and other constraints and consider specific policy guidelines or limitations from Program Standards (BLM Manual Section 1803), Program Activity Policy Statements (BLM 1803), and District Land Use Guides (BLM 1803). The finished plan must be sufficiently practical such that if accepted, it could be put into effect in the planning unit. A set of concise written recommendations are developed and documented with supportive justification for each of the seven resource program activities (Land, Minerals and Energy, Timber, Livestock Forage, Watershed, Wildlife Habitat and Recreation). For each resource activity an overlay is prepared, identifying areas covered by these activity recommendations.

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The "adversary concept" is the basis of MUP-Step 2. In the previous step, each resource specialist has developed the

optimal practical plan for his resource. Now, in MFP-Step 2, the seven resource specialists sit down together each advocating his own plan. During this interaction, conflicts, overlaps, inconsistencies and problems are identified and analyzed. Conflicting and compatible relationships between program activity recommendations (MFP-Step 1) are usually determined either by initially combining the activity recommendation overlays for each program activity on a single overlay for a complete overview or by superimposing the activity recommendation overlays, one over the other, such that overlaps or conflicts may be observed and compared for analysis. Although the Environment Profile portion of the URA is not operational and there is no single step called "the environment," the environment is considered in the MFP. Each situation calls for specific assessment of physical and biological factors analyzed in the URA. The specialists can plan for no more production or products or services than the land is capable of producing, nor more land use or activities than the land can safely absorb. Alternative solutions to various conflicts, overlaps and problems are worked out by compromise among the resource specialists and result in multiple-use recommendations for the planning unit.

MFP-Step 3 - Decision.

After considering specific land and resource use conflicts, proposing alternative solutions and refining these alternatives through public participation, decisions are made as to the final recommendations with regard to the multiple land use and resource development plan for the planning unit. In MFP-Step 3, the District Manager decides which multiple use recommendations or alternatives to adopt and to what extent. These decisions relate overall priorities for specific land or resource uses to specified geographical areas located within the unit and set forth broad objectives and constraints which guide and influence the management of the unit. Under current BLM procedures, State Directors have the prerogative to establish state level review and approval procedures for all MFP's completed in their respective jurisdictional areas.

At present, BLM field offices are preparing MFP's in the steps, as described above. The Bureau has recently revised BLM Manual Section 1608 (Land Use and Development Planning) in draft form*, which has been circulated for review and comment within the BLM Washington Office, but not as yet in the field. The BLM 1608 Draft proposes the following major revisions and refinements to the existing MFP procedure:

*BLM Director's Office Instruction Memo 73-38 of September 24, 1973, Draft Manual Section 1608 - Management Framework Plans.

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- (a) Between URA-Step 4 and MFP-Step 1, the BLM has added an Issues and Planning Objectives section and step, because the Bureau found that field offices tended to plunge into the details of an MFP without first determining and assessing the major land and resources issues that impact or arise from the planning units involved.* The Bureau plans to direct field offices to look at least twenty years into the future in the identification and assessment of issues, needs and the establishment of general land management direction. Under the assumption that the MFP will be updated in 5 years or less, Districts will look 5 years into the future in the establishment of specific land use decisions, objectives and coordination arrangements.
- (b) MFP-Step 1 (Program Activity Recommendations) changes include providing for (1) alternatives within an activity, if needed; (2) an identification of support needs in order to understand the full implication of the activity proposal; (3) a social and economic impact assessment of each activity proposal; and (4) environmental protection and enhancement recommendations as a separate proposal. (The BLM Environmental and Planning Coordination staff in the Washington office will prepare this draft, based upon the structure under development for the URA Environmental Profile.)
- (c) The existing title of MFP-Step 2 (Multiple Use and Support Recommendation) has been changed to Conflict Identification and Analysis. This step includes: (1) comparing MFP-Step 1 activity and environmental recommendations; (2) listing major conflict situations; and (3) analyzing the alternative solutions to identified conflicts. This step will no longer include the preparation of multiple use recommendations; MFP-Step 3 will cover this area. The Denver Service Center (DSC) is currently drafting an appendix of various available analytical methodologies to aid field personnel in conflict analyses.
- (d) MFP-Step 3 will include (1) developing a decision for each resource by starting with MFP-Step 1 recommendations and proceeding through a series of modifications and adjustments for each to reflect policy acceptance, public input, conflict analysis and resolution, and general coordination; (2) consolidating and recording the nature of each support activity's action. The District Manager will be required to: (1) determine which resource activity or environmental recommendations, or portions thereof, cannot be accepted due to unacceptable social, economic, or institutional impact; (2) determine which resource activity or environmental recommendations must be adjusted for minor conflict or coordination reasons; (3) decide how to reconcile major conflicts

*VTN Case Studies revealed that the Utah State Office had initiated its own issues and planning objectives procedures prior to MFP-Step 1, in addition to many of the proposed revisions in the Draft 1608.

and weigh alternative solutions identified in MFP-Step 2; and
(4) restate the resource activity recommendation, after adjustments, as a planning decision for each activity.

(e) State Directors must establish a state level review procedure for MFP documents.

(3) Program Activity Plans

Upon completion of the Management Framework Plan for a given land area (or planning unit), more detailed action and development plans are prepared by the District to lay out, in detail, how each program activity will achieve the objectives prescribed by the MFP. These plans are called Program Activity Plans. The Bureau provides procedural guidance for the following activities:

<u>Program Activity</u>	<u>Plan Title</u>
a. Recreation	Recreation Management Plan
b. Wildlife	Habitat Management Plan
c. Timber	Timber Management Plan
d. Livestock Forage	Allotment Management Plan
e. Fire Protection	Normal Year Fire Plan
f. Roads, Trails & Land Fields	Transportation Planning

Program Activity planning procedures remain to be issued for Lands, Minerals & Energy, and Watershed.

(4) Procedural Sequence

The Bureau prescribes procedural sequences for land use and development planning. Although there are no specific time limits, this process may take a few months or several years. Normally, the preparation of the URA and MFP should be completed in one year to insure the usage of valid data. BLM Plate 3 presents the step-by-step sequence in the preparation of the Unit Resource Analysis, Environmental Profile and the Management Framework Plan.

The steps for the entire LUDP sequence are as follows:

Step One -- Assemble and review needed policy directives (guidance) and information.

and weigh alternative solutions identified in MRP-Step 2; and
 (4) restate the resource activity recommendation, after adjustment, as a planning decision for each activity.

(e) State Directors must establish a state level review procedure for MRP documents.

(3) Program Activity Plans

Upon completion of the Management Framework Plan for a given land area (or planning unit), more detailed action and development plans are prepared by the District to lay out, in detail, how each program activity will achieve the objectives prescribed by the MRP. These plans are called Program Activity Plans. The Bureau provides procedural guidance for the following activities:

<u>Program Activity</u>	<u>Plan Title</u>
a. Reclamation	Reclamation Management Plan
b. Wildlife	Wildlife Management Plan
c. Timber	Timber Management Plan
d. Livestock Range	Altimont Management Plan
e. Fire Protection	Normal Year Fire Plan
f. Roads, Trails & Land Fields	Transportation Planning

Program Activity planning procedures remain to be issued for Lands,

Minerals & Energy, and Waterways.

(4) Procedural Sequence

The Bureau provides procedural sequences for land use and development planning. Although there are no specific time limits, this process may take a few months or several years. Normally, the preparation of the URA and MRP should be completed in one year to insure the usage of valid data. BLM Phase 2 presents the step-by-step sequence in the preparation of the Unit Resource Analysis. Environmental Profile and the Management Framework Plan.

The steps for the entire LUPP sequence are as follows:

Step One - Assembly and review needed policy directives (Guidance) and information.

- a. Check adequacy and currency of Initial Analysis and District Management Profile.
- b. Prepare the Unit Resource Analysis to assemble production, use, condition and potential information for resources related to each program.
- c. Review policy guidance in BLM manuals (1602 and 1603).
- d. Determine the implications of the State Economic Profile, District Economic Profile supplement and District Land Use Guide for the unit(s) being planned.
- e. Review relevant impact studies, interagency plans, or other non-Bureau planning documents or studies to assess their requirements on the unit's resources.

Step Two -- Prepare Management Framework Plan for unit. Analyze land use alternatives and prepare a Management Framework Plan (or plans) for the Unit (or several units together, if necessary, to achieve proper coordination). This plan will show land use allocations and constraints sufficient to coordinate Program Activity Plans.

Step Three -- Prepare Specific Program Activity Plans. Use Management Framework Plan constraints, basic inventory for the concerned activity, and Unit Resource Analysis data for other activities. Follow guidance provided by Program Activity Policy Statements and activity planning procedures.

Step Four -- Update. Periodically review and update all planning materials, using above steps.

Direction from BLM Manuals for the URA and MFP indicate that public participation is required, but do not specifically identify where and when public participation should be sought and inputted. In the case studies, public input normally occurs in URA Step 3 for information and data, and between MFP Steps 1 and 2 in the decision-making process.

BLM Plate 4 presents the actual and projected outputs of the Land Use and Development Planning process. These outputs are the number of planning units and acreage covered by both completed URA and MFP documents. Through fiscal year 1973, 22 percent (or 123) of the total number of BLM Planning Units (approximately 559) were covered by both URA and MFP documents and encompasses 14 percent (or 65,181,000) of

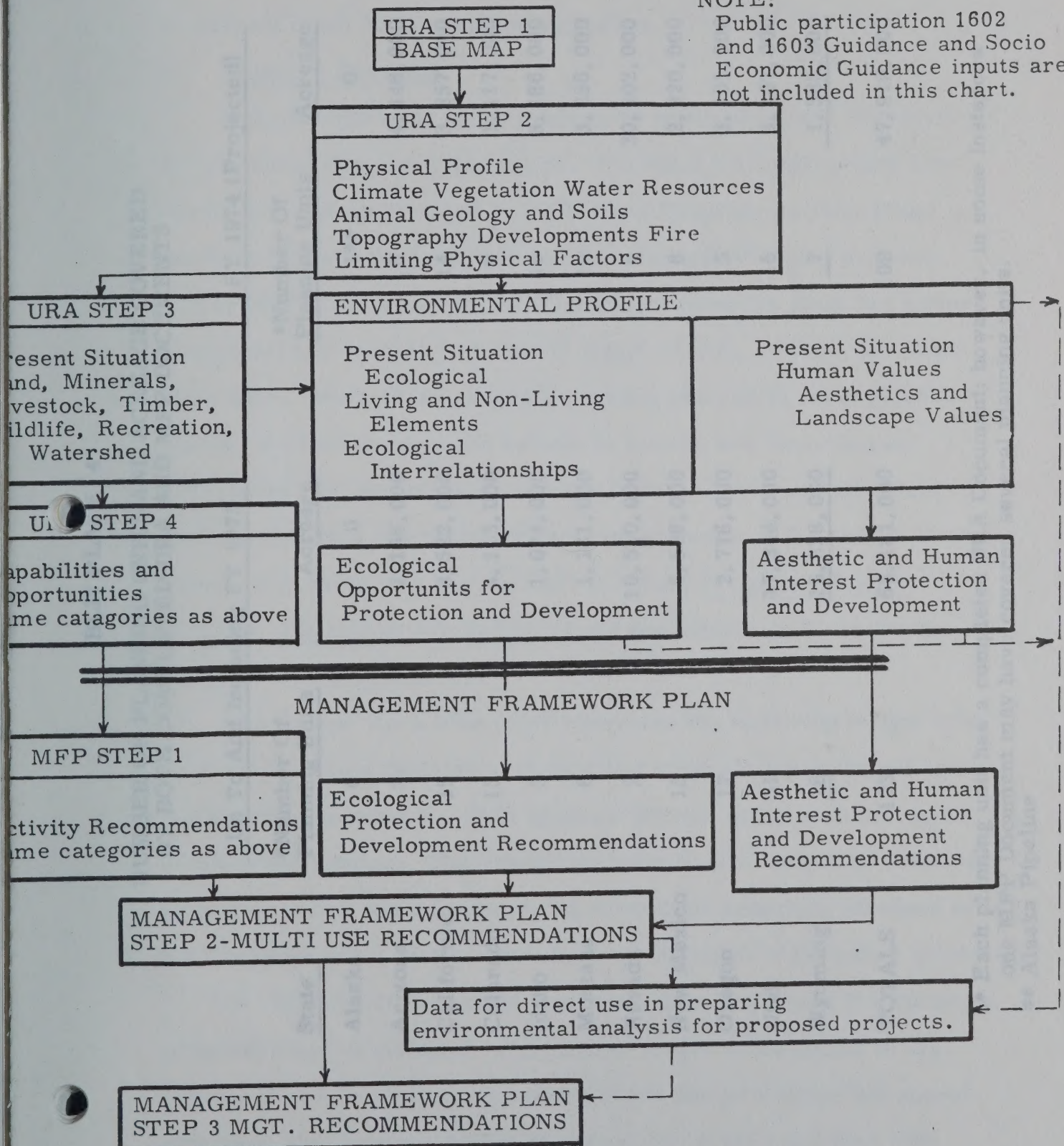
BLM Plate 3

ENVIRONMENTAL INPUT INTO MFPS

UNIT RESOURCE ANALYSIS

NOTE:

Public participation 1602
and 1603 Guidance and Socio
Economic Guidance inputs are
not included in this chart.



BLM PLATE 4

NUMBER OF PLANNING UNITS AND ACREAGE COVERED
BY BOTH COMPLETED URA AND MFP DOCUMENTS

State	Up To And Including FY 1973		FY 1974 (Projected)	
	*Number Of Planning Units	Acreage	*Number Of Planning Units	Acreage
Alaska	0	0	1**	0
Arizona	3	2,156,000	8	4,448,000
California	15	3,622,000	14	3,357,000
Colorado	13	4,113,000	8	1,117,000
Idaho	3	1,074,000	16	3,186,000
Montana	6	1,161,000	19	3,886,000
Nevada	2	10,510,000	8	20,402,000
New Mexico	15	6,596,000	8	2,920,000
Oregon	17	2,776,000	5	3,101,000
Utah	31	17,344,000	15	4,107,000
Wyoming	18	15,828,000	7	1,385,000
TOTALS	123	65,181,000	109	47,919,000

* Each planning unit has a completed URA Document; however, in some instances one MFP Document may have covered several planning units.

** Alaska Pipeline

the total acreage administered by the BLM. By the end of fiscal year 1974, both URA and MFP documents will have been completed for 41 percent (or 232) of the total BLM units, which include approximately 25 percent of all BLM administered lands.

b. Program Planning

Program Planning is the process by which plans are converted or translated into action programs. Potential action programs are based upon and constrained by MFP's and Program Activity Plans set forth through the Land Use and Development Planning process. Unlike MFP's and Program Activity Plans, program plans (or action programs) are specific in terms of length of time, dollars and work to be done. Much of the program planning process is accomplished through the budget cycle and related to Bureau and Departmental procedures. Proposed actions at the District Level are submitted for consideration and funding in the preparation of the Annual Work Plan. At present, the Bureau has not issued Program Decision Criteria, District Program Guides and procedural guidance for its Program Planning process.

The Annual Work Plan (AWP) becomes the operating budget (OB) once the Bureau's Division of Budget and Program Development and the Director approve it. This approval follows Congressional appropriation and funding. The appropriation is BLM's budgetary constraint. Operating under this constraint, BLM initiates programs intended to maximize benefits, which are defined as the value of the output produced.

The objective of the annual work plan is to implement the Bureau's program plans as justified in the annual budget presentation to the President and Congress. In support of the annual request for appropriations, the Bureau justifies the amount of funds requested with

the total acreage administered by the BLM. By the end of fiscal year 1974, both UHA and MRP documents will have been completed for 40 percent (or 35%) of the total BLM units, which include approximately 25 percent of all BLM administered lands.

b. Program Planning

Program Planning is the process by which plans are converted or translated into action programs. Potential action programs are based upon and constrained by MRP's and Program Activity Plans set forth through the Land Use and Development Planning process. Unlike MRP's and Program Activity Plans, program plans for action programs are specific in terms of length of time, dollars and work to be done. Much of the program planning process is accomplished through the budget cycle and related to Bureau and Departmental procedures. Proposed actions at the District level are submitted for consideration and funding in the preparation of the Annual Work Plan. At present, the Bureau has not issued Program Decision Criteria, District Program Guides and procedural guidance for its

Program Planning process.

The Annual Work Plan (AWP) becomes the operating budget (OB) once the Bureau's Division of Budget and Program Development and the Director approve it. This approval follows Congressional appropriation and funding. The appropriation is BLM's primary constraint. Operating within this constraint, BLM initiates programs intended to maximize benefits, which are defined as the value of the output produced. The objective of the annual work plan is to implement the Bureau's program plan as justified in the annual budget presentation to the President and Congress. In support of the annual request for appropriations, the Bureau justifies the amount of funds requested with

specific work plans for each program. These justifications are developed from needs identified through the programming system.

When new obligational authority is appropriated by an act of Congress, the Bureau has the responsibility for accomplishing the program set forth in budget justifications. The operating budget, based on the appropriation, is the management tool for executing each specific program the Bureau is expected to accomplish during the current fiscal year.

The annual work plan is the tool for development of organizational operating plans in accordance with the specific commitments and policy direction set forth each year in the AWP directives (Instruction Memorandum). The AWP submission by each organizational unit within the Bureau, after it is approved by the directorate as being consistent with the Appropriation Act, becomes the current year's operating budget for that organizational unit.

As part of the programming process, BLM's Division of Budget reviews the Bureau's existing goals and objectives. This review results in special studies, analysis and revisions in overall plans. From these and prepackaged submissions from field offices, Budget makes recommendations to the Director of BLM. The Director then issues program directives to the Bureau's offices.

The objective of the program prepackages is to provide the information and justification needed to determine priority program requirements for the next program year. Prepackage statements are the principal means by which each state, service center, or other field office head presents his program problems and priorities to the Director. They are a key ingredient in determining the specific packages to be prepared in accordance with package advices

specific work plans for each program. These justifications are developed from needs identified through the programming system. When new organizational authority is appropriated by an act of Congress, the Bureau has the responsibility for accomplishing the program set forth in budget justifications. The operating budget, based on the appropriation, is the management tool for executing each specific program. The Bureau is expected to accomplish during the current fiscal year.

The annual work plan is the tool for development of organizational operating plans in accordance with the specific commitments and policy direction set forth each year in the AWP directives (Instruction Memorandum). The AWP submission by each organizational unit within the Bureau, after it is approved by the directorate as being consistent with the Appropriation Act, becomes the current year's operating budget for that organizational unit.

As part of the programming process, BLM's Division of Budget reviews the Bureau's existing goals and objectives. This review results in special studies, analysis and revisions in overall plans. From these and packaged submissions from field offices, Budget makes recommendations to the Director of BLM. The Director then forwards program directives to the Bureau's offices.

The objective of the program packages is to provide the information and justification needed to determine priority program commitments for the next program year. Package statements are the principal means by which each state, service center, or other field office head presents his program problems and priorities to the Director. They are a key ingredient in determining the appropriate packages to be prepared in accordance with package sub-

for the next program year. Program advices are informational inputs for producing program prepackages. Program advices, also called package advices or program package advices, detail program proposals, fundings, phasings, budget outlook and submission instruction.

BLM defines a program as "the plan of action and resources set forth to accomplish a stated and achievable goal. Progress towards the goal is measured in terms of goods and services (outputs) produced. A program can be proposed for any segment(s) of the Bureau workload which produce(s) or can be used to produce outputs to attain a goal or solve a problem."

Programming is one phase of a continuous interwoven process which also includes planning and budgeting. The objectives of the Programming System are to:

- (1) Translate goals and objectives (plans) into well-defined courses of action.
- (2) Provide a framework for rational decision-making at all organizational levels.
- (3) Standardize the presentation of program proposals.
- (4) Provide a tenable basis for budget requests.
- (5) Help determine allocation of resources.
- (6) Evaluate the short and long range implications of program proposals.

Programs are initiated to meet the need for goods and services. Limited funds and manpower require that the most pressing needs receive first consideration. One of the most important factors in deciding which programs will emerge on top is an analysis of (1) the problem, (2) program objectives which tend to alleviate the problem, (3) identification of alternative course of action, (4) analysis of alternatives and (5) a program decision based upon

for the next program year. Program advisers are informational
 issues for producing program packages. Program advisers, also
 called package advisers or program package advisers, detail program
 proposals, findings, packages, budget outlook and submission
 instruction.

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 set forth to accomplish a stated and achievable goal. Progress
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 analysis of alternatives and (5) a program decision based upon

the relationship of cost to benefits or effectiveness. Analysis is to be integrated with planning system components including Economic Profiles, Management Framework Plans and Activity Plans. Offices then rank programs based upon cost-benefit or cost-effectiveness criteria.

In January, the different offices submit their programs to various divisions within BLM who analyze the programs and make recommendations to the Director. The Director decides the programs to be undertaken in the program year and asks the Division of Budget and the Program Development to prepare preliminary budget estimates for the Department of Interior.

The Department incorporates the preliminary budget in its Planning and Programming Budget which is submitted to the OMB in May or June. The OMB establishes planning ceilings. Recommendations and program decisions are made based upon these allowances. The Budget Division prepares program backup material, budget justifications and schedules for submission to the Bureau of the Budget and the President By September 30. Estimates are subsequently revised for incorporation into the President's budget which is submitted to Congress in January. Budget estimates are incorporated into Preliminary AWP advices which are sent to state offices in January, along with the program advices for the next budget cycle.

During February, BLM state offices prepare Preliminary Annual Work Plans. These provide the Director's office with revised plans consistent with the anticipated budget constraint. The PAWP's are reviewed in March by the Director, the Division of Budget, and other affected offices. In June, BLM's Washington office issues the Annual Work Plan Advices. These are in the form of an Instruction Memo

the relationship of cost to benefits or effectiveness. Analysis is to be integrated with planning systems components including Economic Profiles, Management Framework Plans and Activity Plans. Of less than high priority based upon cost-benefit or cost-effectiveness criteria.

In January, the different offices submit their programs to various divisions within BLM who analyze the programs and make recommendations to the Director. The Director decides the programs to be undertaken in the program year and asks the Division of Budget and the Program Development to prepare preliminary budget estimates for the Department of Interior.

The Department incorporates the preliminary budget in its Planning and Programming Budget which is submitted to the OMB in May or June. The OMB establishes planning ceilings. Recommendations and program decisions are made based upon these allocations. The Budget Division prepares program basis material, budget justifications and schedules for submission to the Bureau of the Budget and the President by September 30. Estimates are subsequently revised for incorporation into the President's budget which is submitted to Congress in January. Budget estimates are incorporated into Preliminary AWP advice which are sent to state offices in January, along with the program advice for the next budget cycle.

During February, BLM state offices prepare Preliminary Annual Work Plans. These provide the Director's office with recent plans consistent with the anticipated budget constraints. The PAWPs are reviewed in March by the Director, the Division of Budget, and other affected offices. In June, BLM's Washington office issues the Annual Work Plan Advice. These are in the form of an Instruction Memo

to guide field offices in preparing AWP's. The instructions include by appropriation, activity, and subactivity the goals, priorities, and objectives to be met. They also contain a provisional distribution of direct costs and man-months by subactivity and total authorized permanent budgeted positions. During July, the state offices prepare Annual Work Plans for the Washington office which is receiving funding from Congress through the Bureau of Budget. During August, the AWP's are reviewed and, upon the Directors issuance, become the Operating Budget.

In summary, the AWP is developed according to the following steps:

- (1) Program Directives - Program directives are prepared in the Washington office and provide the state offices with both general and specific directives as well as allowances. The state office utilizes the Washington office directives to outline priorities, determine emphasis required, and set management and production quotas for the district office. The state office then prepares its own program directives for the various districts. The district office reviews the state office directives in light of planning unit MFP's and prepares a plan to meet state office directives.
- (2) District Office Program Prepackages - The district office prepares a plan to meet the state office directives. This may include some changes from the requirements set by the state office. Any changes can then be compensated for within the state office by altering the various district requirements or altering state office plans submitted back to the Washington office.
- (3) State Office Program Prepackages - The state office proposed plan is prepared from all the district office plans and is submitted to the Washington office. If there are alterations in requirements established within the original program directive, the Washington office will attempt to compensate for these alterations by adjusting various state office requirements.
- (4) Finalized Annual Work Plans - Once the program prepackages have been evaluated, and changes made and agreed upon, they now become the annual work plan for the various operating organizational levels. When finalized, the annual work plans are computerized at the service center. This computerization

to guide field offices in preparing AWP's. The instructions include by appropriation, activity, and subjectively the goals, priorities, and objectives to be met. They also contain a provisional distribution of direct costs and non-personnel by subjectively and total authorized permanent budgeted positions. During July, the state offices prepare Annual Work Plans for the Washington office which is receiving funding from Congress through the Bureau of Budget. During August, the AWP's are reviewed and, upon the Director's issuance, become the Operating Budget.

In summary, the AWP is developed according to the following

steps:

- (1) Program Directives - Program directives are prepared in the Washington office and provide the state offices with both general and specific directives as well as allowances. The state office utilizes the Washington office directives to outline priorities, determine emphasis in reporting, and set management and production goals for the district office. The state office then prepares its own program directives for the various districts. The district office reviews the state office directives in light of planning and AWP's and prepares a plan to meet state office directives.
- (2) District Office Program Packages - The district office prepares a plan to meet the state office directives. This may include some changes from the requirements set by the state office. Any changes can then be compensated for within the state office by altering the various district requirements or altering state office plans submitted back to the Washington office.
- (3) State Office Program Packages - The state office proposed plan is prepared from all the district office plans and is submitted to the Washington office. If there are alterations in requirements established within the original program directive, the Washington office will attempt to compensate for these alterations by adjusting various state office requirements.
- (4) Finalized Annual Work Plans - Once the program packages have been reviewed, and changes made and agreed upon, they now become the annual work plan for the various operating organizational levels. When finalized, the annual work plans are computerized at the service center. This computerization

allows the various operating levels to continuously review operations against the annual work plan.

c. Linkage Between Plans and Programs

In order to facilitate the linkages between Land Use and Development Planning and Program Planning, and between The Planning System (specifically Program Planning) and the Program and Financial Management System, the Management Action Plan/Multi-Year Program (MAP-MYP) is currently being developed by BLM Core and Design teams and test Districts in Wyoming. MAP-MYP addresses an identified need for standardizing program objectives in output terms. Quantified objectives for each geographic area will generate from Management Framework Plans and action planning at the field level. Non-resource program objectives will be generated and quantified at all other management levels. The structure is designed to:

- (1) Indicate the multiple objectives for each program;
- (2) Assess past management actions and current program status;
- (3) Establish program levels as an aid to defining priorities;
- (4) Utilize a building block approach to provide input, output and benefit/results independently for each program objective;
- (5) Measure total workload for analyzing program projections.

Each major program in the Bureau contains several objectives. The resource programs represent a dual BLM mission in providing goods and services to the public while protecting and conserving resource values. In developing objectives, two requirements must be met:

- (1) Objectives be expressed in output terms that have a commonality from the resource area to the budget level of the Bureau so that program information can be aggregated at any and all levels in the management hierarchy.
- (2) Objectives must be structured in a way that the Area Manager can relate to the specific management and operational goals for his area.

allow the various operating levels to continuously re-
view operations against the annual work plan.

a. Linkage Between Plans and Programs

In order to facilitate the linkage between the Development Planning and Program Planning, and between the Planning System (specifically Program Planning) and the Program and Financial Management System, the Management Action Plan/5-10 Year Program (MAP-MYP) is currently being developed by BLM Core and Design Teams and West Districts in Wyoming. MAP-MYP addresses

an identified need for standardizing program objectives in a program. Quantified objectives for each geographic area will generate from Management Framework Plans and action planning at the field level. Non-resource program objectives will be generated and parallel to all other management levels. The structure is designed for

- (1) Define the multiple objectives for each program;
 - (2) Assess each management action and current program status;
 - (3) Establish program levels as an aid to defining priorities;
 - (4) Define a building block approach to provide input, output, and performance indicators for each program objective;
 - (5) Measure and monitor progress for analyzing program performance.
- Each major program in the Bureau contains several objectives.

The resource programs represent a dual BLM mission in providing goods and services to the public while protecting and conserving resource values. In developing objectives, two requirements must be met:

- (1) Objectives be expressed in output terms that have a measurability from the resource area to the budget level of the Bureau so that program performance can be objectively measured at any and all levels in the management hierarchy.
- (2) Objectives must be structured in a way that the BLM Manager can relate to the specific management and operational goals for his area.

The MAP-MYP procedures remain largely experimental and nonoperational at this time. In the interim, the AWP process involved in Program Planning must continue to serve as the link between plans and action programs.

4. Environmental Analysis Process

a. Objectives

The BLM environmental analysis procedures are designed to accomplish the following objectives:*

- (1) Provide a system and analytical process to improve the quality of BLM actions by identifying the anticipated environmental impacts of proposed actions and modifying those actions to minimize adverse environmental impacts and to enhance beneficial impacts.
- (2) To help determine if an environmental statement is required.
- (3) To document the justification for not writing an environmental statement if that decision is made.

b. Relationship between Environmental Analysis and the Planning System

The role of the environmental analysis procedure is to assure consideration of environmental values at all levels of planning and decisionmaking. The Bureau makes a clear distinction between the following terms:

- (1) Environmental Analysis is defined as the day-to-day consideration of environmental factors in land management decisions.
- (2) Environmental Analysis Record is a specific documentation procedure and format for recording environmental analyses.

Ideally, all actions taken by the Bureau must be based on the following three planning levels, each of which includes its own environmental analysis:

*BLM Draft Manual 1791, set forth by BLM I.M. 73-354 of August 21, 1973. Also BLM I.M. 72-135 of April 14, 1972.

The MAP-MYP procedures remain largely experimental and nonoperational at this time. In the interim, the AWP process involved in Program Planning must continue to serve as the link between plans and action programs.

4. Environmental Analysis Process

a. Objectives

The EIA environmental analysis procedures are designed to accomplish the following objectives:

- (1) Provide a system and analytical process to improve the quality of EIA actions by identifying the anticipated environmental impacts of proposed actions and modifying those actions to minimize adverse environmental impacts and to enhance beneficial impacts.
- (2) To help determine if an environmental statement is required.
- (3) To document the justification for not writing an environmental statement if that decision is made.

b. Relationship between Environmental Analysis and the Planning System

The role of the environmental analysis procedure is to assure consideration of environmental values at all levels of planning and decisionmaking. The Bureau makes a clear distinction between the

the following terms:

- (1) Environmental Analysis is defined as the day-to-day consideration of environmental factors in land management decisions.
- (2) Environmental Analysis Record is a specific documentation procedure and format for recording environmental analysis.

Usually, all actions taken by the Bureau must be based on the following three planning levels, each of which includes its own environmental analysis:

- (1) The Management Framework Plan.
- (2) A Program Activity Plan that is consistent with its supporting MFP.
- (3) An action plan (or plan for a proposed job or action).

Environmental analysis in the Planning System is accomplished in the Environmental Profile, the procedures of which are currently being developed and have not been operationalized Bureau-wide. Data are gathered in the environmental profile as a part of the URA, and recommendations for environmental protection and enhancement are considered in steps leading to the MFP. The environmental profile procedures reflect a data continuity so that environmental data assembled in the URA can be used in subsequent environmental analyses. Documentation of the environmental analysis in the EAR format is not required for the MFP. The BLM views the MFP as a document providing broad guidance and reference for future decisions and not as a document which dictates future actions. Since the MFP is not considered an action mechanism, the Bureau does not formalize the environmental analysis in the framework of an EAR. For a Program Activity Plan or action plan, the environmental analysis must culminate in an EAR.

c. Development

Following passage of NEPA and issuance of Manual Section 1792 for Environmental Impact Statements, the BLM developed the Environmental Analysis Record (EAR) to determine whether or not a statement is required. BLM Instruction Memo 72-135 (EAR), April 1972, expresses the initial guidance and format to be used by all BLM offices to document their environmental analysis. NEPA requires an initial assessment of the environmental impacts

(1) The Management Framework Plan.

(2) A Program Activity Plan that is consistent with its supporting MFP.

(3) An action plan for a proposed job or action.

Environmental analysis in the Planning System is accomplished in the Environmental Profile, the procedures of which are currently being developed and have not been operationalized Bureau-wide. Data are gathered in the environmental profile as a part of the EIA, and recommendations for environmental protection and enhancement are considered in steps leading to the MFP. The environmental profile procedures reflect a data continuity as that environmental data assembled in the EIA can be used in subsequent environmental analyses. Documentation of the environmental analysis in the EIA format is not required for the MFP. The BLM views the MFP as a document providing broad guidance and reference for future decisions and not as a document which dictates future actions. Since the MFP is not considered an action mechanism, the Bureau does not formalize the environmental analysis in the framework of an EIA. For a Program Activity Plan or action plan, the environmental analysis must culminate in an EIA.

c. Development

Following passage of NEPA and issuance of Manual Section 1702 for Environmental Impact Statements, the BLM developed the Environmental Analysis Record (EAR) to determine whether or not a statement is required. BLM Instruction Memo 75-154 (EAR), April 1975, expresses the initial guidance and format to be used by all BLM offices to document their environmental analysis. NEPA requires an initial assessment of the environmental impacts

of a proposed action to determine whether or not a draft EIS should be prepared. The EAR represents the BLM's response to this NEPA requirement and is the decision document regarding the question of significance and subsequent preparation of the EIS. At this early stage of EAR development, the format was briefly outlined. Among the EAR components is a description of the existing environment. Included in this description are a discussion of non-living components, ecological interrelationships, aesthetics, and human interest values. The section following recommends measures for the mitigation of environmental impacts for the proposed action. Alternatives are then generated and follow the environmental description and mitigation measures format prescribed above. Additionally, the substance and intensity of public concern are identified. Upon completion of this analysis the recommendation to prepare the EIS is presented.

In response to District concern aroused by the lack of Washington guidance specifying level of quality and standards of detail, the BLM promulgated an appendix to Instruction Memo 72-135, the central purpose of which was to remedy District uncertainty. While the EAR format was not further detailed, the Bureau developed guidance to permit the District Office to write an EAR at a level of detail commensurate with the type of proposed action and nature of environment in which the action takes place. To this end, the Bureau suggested three levels of detail for EAR preparation -- high, medium and low -- given the nature of the proposed action. Also, the Bureau specified the kinds of actions by title and example that would require a high level of detail.

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In response to District concerns expressed by the lack of Washington guidance specifying level of quality and standards of detail, the BLM promulgated an appendix to Instruction Memo 73-156, the central purpose of which was to remedy District uncertainty. While the EIS format was not further detailed, the Bureau developed guidance to permit the District Office to write an EIS at a level of detail commensurate with the type of proposed action and nature of environment in which the action takes place. To this end, the Bureau suggested three levels of detail for EIS preparation -- high, medium and low -- given the nature of the proposed action. Also, the Bureau specified the kinds of actions by title and example that would require a high level of detail.

Recently, the BLM completed the development of its response to NEPA's requirement for an initial assessment analysis. The Draft BLM Manual Section 1791 (August 1973) presents detailed and descriptive procedures and format items for the preparation of the EAR. The latest guidance specifies goals that the intensity of analysis must fulfill. Initial EAR content remains unchanged except that it has been greatly elaborated. For each format item, there is direction as to extent of requisite analysis with accompanying standards. Employment of interdisciplinary skills is formally required. Impacts residual to the environmental analysis and the degree of controversy constitute the decision to prepare the environmental statements.

To facilitate District understanding as to which actions require the EAR and when they should be prepared, the Bureau has generated a supplemental document which details by resource activity the kinds of actions with examples and the timing of their preparation.* An additional appendix, titled "The Environmental Analysis Digest" (EAD)**, aids in the analysis of anticipated impacts for the proposed and alternative actions. The EAD organizes the environment into a number of elements. For each element, primary characteristics have been defined to assist in understanding potential impacts, "change agents" have been identified as factors that could alter the primary characteristics, and standards have been established for the environmental maintenance of the elements. The environmental analysis documentation for the EAR consists

*BLM Draft Manual 1971 (August 1973), Illustration No. 1: Timing and Circumstances of Environmental Analysis.

**Ibid., Illustration No. 5.

Recently, the BLM completed the development of its response to NEPA's requirement for an initial assessment analysis. The Draft BLM Manual Section 1001 (August 1973) presents detailed and descriptive procedures and format items for the preparation of the EIS. The latest guidance agencies note that the necessity of analysis must be left. Initial EIS content remains unchanged except that it has been greatly abbreviated. For each format item, there is a direction as to extent of repetitive analysis with accompanying standards. Employment of interdisciplinary skills is formally required. Impact related to the environmental analysis and the degree of controversy constitute the decision to prepare the environmental statement.

To facilitate District understanding as to which actions require the EIS and when they should be prepared, the Bureau has prepared a hypothetical document which details by resource activity the kinds of actions with examples and the timing of their preparation. An additional appendix, titled "The Environmental Analysis Objectives" (EAO), also in the analysis of potential impacts for the proposed and alternative actions. The EAO organizes the environment into a number of elements. For each element, primary characteristics have been defined to assist in understanding potential impacts. "change agents" have been identified as factors that could alter the primary characteristics, and standards have been established for the environmental maintenance of the elements. The environmental analysis documentation for the EIS consists

of the Environmental Profile, a subset of the URA. The Environmental Profile collects environmental data and synthesizes the data to express ecological interrelationships. Thus, the EAR system has been developed and accordingly outlined.

d. Responsibilities of Bureau Officials

- (1) The Director and the Associate Director are responsible for assuring that environmental values are considered in all BLM planning and decisionmaking through implementation of BLM environmental analysis procedures.
- (2) The Assistant Director, Legislation and Plans is responsible for:
 - o Developing policy, procedures, and standards for Bureau environmental analysis.
 - o Coordinating the implementation of Bureau environmental analysis procedures.
 - o Providing for Bureauwide training on procedures and standards for environmental analysis.
 - o Providing for monitoring, evaluation and standards for environmental analysis.
- (3) Assistant Directors within their areas of responsibility are responsible for:
 - o Providing for timely and effective implementation of environmental analysis procedures.
 - o Providing for training required for effective, professional analysis of environmental impacts.
 - o Developing procedures for continuing evaluation and monitoring of environmental impacts.
- (4) State Directors, Service Center Directors, Director-Boise Interagency Fire Center (BIFC), Director Eastern States Office and Manager Outer Continental Shelf Office, within their areas of responsibility are responsible for:
 - o Making environmental analysis of Bureau actions including assessing alternatives and developing mitigating measures to minimize environmental impacts of the proposed action.
 - o Recommending the preparation of an environmental statement in cases where the analysis shows an action to be a major action significantly affecting the quality of the environment, or when the proposed action is highly controversial.

- o Providing guidance and training to field personnel involved in the actual environmental analysis and the preparation of the environmental analysis records.
- o Providing timely and constructive evaluation of field environmental analysis records to insure conformance to quality standards and procedures.
- o Assuring the continued monitoring and recording of environmental impacts from actions occurring on the national resource lands.

e. EAR Format and Content

The Bureau has established an EAR format which is based on the legal requirements of NEPA Section 102 (2) (c). BLM Instruction Memorandum 72-135 of April 14, 1972, provided an initial Bureau-wide format. Recently, the Bureau issued Draft Manual Section 1791 (Environmental Analysis, August 1973) which prescribes the following format:

- (1) Description of proposed action and alternatives
- (2) Description of the existing environment
- (3) Analysis of proposed action and alternatives
 - (a) Environmental impacts
 - (1) Anticipated impacts
 - (2) Possible mitigating or enhancing measures
 - (3) Recommendations for mitigations or enhancement
 - (4) Residual impacts
 - (b) Relationship between short-term use and long-term productivity
 - (c) Irreversible and Irretrievable commitments of resources
- (4) Persons, groups and government agencies consulted
- (5) Intensity of public interest
- (6) Participating staff
- (7) Recommendations on environmental statement
- (8) Signatures

- o Providing training and assistance to field personnel involved in the environmental analysis and the preparation of the environmental impact reports.
- o Providing timely and consistent evaluation of field environmental analysis reports to insure conformance to quality standards and procedures.
- o Assessing the continued monitoring and recording of environmental impacts from actions occurring on the natural resource lands.

2. EAR Format and Content

The Bureau has established an EAR format which is based on the legal requirements of NEPA Section 102 (2) (c). BIA's Instruction Memorandum 75-125 of April 14, 1975, provided an initial Bureau wide format. Recently, the Bureau issued Local Manual Section 1781 (Environmental Analysis, August 1975) which prescribed the following format:

- (1) Description of proposed action and alternatives
- (2) Description of the existing environment
- (3) Analysis of proposed action and alternatives
 - (a) Environmental impacts
 - (1) Anticipated impacts
 - (2) Possible mitigation or avoidance measures
 - (3) Recommendations for mitigation or enhancement
 - (4) Residual impacts
 - (b) Relationship between short-term use and long-term productivity
 - (c) Irreversible and irretrievable commitments of resources
- (4) Persons, groups and government agencies consulted
- (5) Intensity of public interest
- (6) Participating staff
- (7) Recommendations on environmental statement
- (8) Signatures

The analysis of environmental impacts involves four steps:

- (1) Anticipated impacts. This step prescribes the determination of impacts, both beneficial and adverse, on living and non-living components, ecological interrelationships, and human values that are expected to occur under the proposed action or alternatives. The primary questions addressed are: Is the impact possible; is the impact beneficial or adverse; and what is the type and degree of the impact? The Environmental Analysis Digest serves as an aid in this analysis, since it describes change agents which influence the cause and nature of the impact and provides standards for each environmental element.
- (2) Possible mitigating or enhancing measures. After anticipated impacts have been determined, mitigating or enhancing measures to reduce these impacts are identified and include location or design modifications, timing, monitoring, restoration, etc. BLM Manual Section 1791 denotes that economic, political or social constraints should not be considered in developing these measures.
- (3) Recommendations for mitigation or enhancement of environmental impacts. This step prescribes the consideration and selection of those measures in Step 2 that mitigate adverse environmental impacts, foster beneficial impacts, and are "defensible."
- (4) Residual impacts. Residual impacts are the net result of applying Step 3 recommendations to Step 1 impacts. In other words, anticipated impacts (Step 1) plus recommendations for mitigation or enhancement of environmental impacts (Step 3) equals residual impacts. In this step, these residual impacts are analyzed and documented in such a manner that will enable decisionmakers and the public to logically determine (a) the best alternative, (b) the need for an EIS because residual impacts are significant, or (c) significant adverse impacts which substantiate a decision to reject the proposed action.

The Bureau encourages public involvement and meetings to discuss a proposed action and receive public feedback. EAR procedures call for an assessment of the intensity of public interest. In this assessment, the degree of public review and controversy are determined. Local review may be sufficient for actions small in scope and impact, whereas, actions large in scope and impact may demand regional, state or national review. An analysis of the residual impacts and the degree of controversy determines the necessity for an environmental statement.

The analysis of environmental impacts involves four steps:

(1) Anticipated impacts. This step prescribes the determination of impacts, both beneficial and adverse, on living and non-living components, sociological interrelationships, and human values that are expected to occur under the proposed action or alternatives. The primary questions addressed are: Is the impact potential in the impact beneficial or adverse; and what is the type and degree of the impact? The Environmental Analysis Digest serves as an aid in this analysis, since it describes various types of impacts which influence the cause and nature of the impact and provides standards for each environmental element.

(2) Possible mitigation or enhancing measures. After anticipated impacts have been determined, mitigation or enhancing measures to reduce these impacts are identified and included in the action or design modifications, timing, monitoring, restoration, etc. BLM Manual Section 131 denotes that economic, political or social constraints should not be considered in developing these measures.

(3) Recommendations for mitigation or enhancement of environmental impacts. This step prescribes the consideration and selection of those measures in Step 2 that mitigate adverse environmental impacts, foster beneficial impacts, and are "desirable."

(4) Residual impacts. Residual impacts are the net result of applying Step 3 recommendations to Step 1 impacts. In other words, anticipated impacts (Step 1) plus recommendations for mitigation or enhancement of environmental impacts (Step 3) equals residual impacts. In this step, these residual impacts are analyzed and documented in such a manner that will enable decisionmakers and the public to logically determine (a) the best alternative, (b) the need for an EIS, (c) the residual impacts are significant, or (d) significant adverse impacts which substantiate a decision to reject the proposed action.

The Bureau encourages public involvement and meetings to discuss a proposed action and receive public feedback. EAR procedures call for an assessment of the intensity of public interest. In this assessment, the degree of public review and controversy are determined. Initial review may be sufficient for actions small in scope and impact, whereas, actions large in scope and impact may demand regional, state or national review. An analysis of the residual impacts and the degree of controversy determines the necessity for an environmental statement.

f. Decision Linkage Between the EAR and EIS

The EAR is the decision document which determines whether or not an EIS should be prepared. In the conduct of the BLM case studies, VTN staff members found that EAR procedures are fully utilized and operational. This finding is substantiated by the large and increasing number of EAR documents which have been prepared by the BLM districts over the past several years. A vast majority of these EAR's do not recommend preparation of an EIS. In fact, the field offices, examined in the case studies, have been directly involved in EIS preparation in only a very few instances, if any. In a sense, the EAR functions as a test which decides on the necessity for an EIS. Evidently, as revealed in the case studies and based on the fact that the BLM has prepared so few environmental statements*, this test has proven so severe as to produce few recommendations disposed to the preparation of an EIS.

The EAR recommendation concerning EIS preparation involves a complex decision hierarchy. If the District Manager recommends in an EAR that a statement is not necessary, his decision becomes final and does not require review and approval by higher authority. On the other hand, if the District Manager recommends EIS preparation, then he must forward the EAR for review and a decision from the State Office. If the State Office disagrees with the District's recommendations for EIS preparation, its veto becomes the final decision and no EIS is prepared. However, if the State Office concurs with the District's recommendations to prepare an EIS, the State Office transmits its decision to the Washington Office of the BLM for review and

*Refer to Environmental Impact Statement Process section, "Outputs of the EIS Process."

1. Decision Making Between the EAR and EIS

The EAR is the decision document which determines whether or not an EIS should be prepared. In the context of the BLM case studies, VTN staff members found that EAR procedures are fairly rigid and operational. This finding is substantiated by the large and increasing number of EAR documents which have been prepared by the BLM districts over the past several years. A vast majority of these EARs do not recommend preparation of an EIS. In fact, the bulk of cases examined in the case studies, have been directly involved in EIS preparation in only a very few instances. If any, in a sense, the EAR functions as a test which landed on the necessity for an EIS. Evidently, as revealed in the case studies and based on the fact that the BLM has prepared so few environmental statements, the test has proven so severe as to produce few recommendations designed to the preparation of an EIS.

The EAR recommendation concerning EIS preparation involves a complex decision hierarchy. If the District Manager recommends an EAR that a statement is not necessary, his decision becomes final and does not require review and approval by higher authority. On the other hand, if the District Manager recommends EIS preparation, then he must forward the EAR for review and a decision from the State Office. If the State Office disagrees with the District's recommendation for EIS preparation, its veto becomes the final decision and no EIS is prepared. However, if the State Office concurs with the District's recommendations to prepare an EIS, the State Office transmits its decision to the Washington Office of the BLM for review and

consultation with the Department of Interior officials, which include the Assistant Secretary of Program Policy and the Solicitor. The Washington level decision becomes final. All EAR's which relate to energy matters require automatic submission to Washington, D.C., for review and decision by Bureau and Department officials.

5. Environmental Impact Statement Process

a. Objectives

The BLM prescribes EIS procedures in order to accomplish the following objectives:

1. To meet statutory goals and requirements of the Council on Environmental Quality and the Department for the preparation and review of environmental statements.
2. To identify and develop methods and procedures required for preparation and review of environmental statements;
3. To insure unquantified environmental values are considered along with economic and technical considerations in the decision-making process.

b. Development

After completion of an EAR with the determination that potential impacts may be significant, the BLM prepares the environmental statement. BLM Manual Section 1792 (June, 1972) delineates the responsibilities of Bureau officials, the hierarchal framework for approval and review, and the contents of the statement. Items included in the body of the statement are: description of the proposal, description of the environment, the environmental impact of the proposed action, unavoidable adverse effects, the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, irreversible and irretrievable commitments of resources, and alternatives to the proposed actions. Procedures include available avenues for public participation and interagency review.

consultation with the Department of Interior officials, which include the Assistant Secretary of Program Policy and the Solicitor. The Washington level decision becomes final. All EAB's which relate to energy matters require automatic submission to Washington, D.C., for review and decision by Bureau and Department officials.

5. Environmental Impact Statement Process

a. Objectives

The EIM prescribes EIS procedures in order to accom-

plish the following objectives:

1. To meet statutory goals and requirements of the Council on Environmental Quality and the Department for the preparation and review of environmental statements.
2. To identify and develop methods and procedures required for preparation and review of environmental statements.
3. To insure unassisted environmental values are considered along with economic and technical considerations in the decision-making process.

b. Development

After completion of an EAB with the determination that potential impacts may be significant, the EIM prescribes the environmental statement. EIM Manual Section 1702 (June, 1973) delineates the responsibilities of Bureau officials, the hierarchical framework for approval and review, and the contents of the statement. Items included in the body of the statement are: description of the proposal, description of the environment, the environmental impact of the proposed action, unavoidable adverse effects, the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, irreversible and irretrievable commitments of resources, and alternatives to the proposed action. Procedures include available avenues for public participation and interagency review.

In response to the most recent CEQ guidelines (August 1973), the BLM has revised Manual Section 1792.* Included now is a test for significance which is founded on an unclear interpretation of the ambiguous words - major, significant effect, and environmental quality. The body of the statement has been enlarged to include the relationship of the proposed action to existing land use plans. Environmental impacts now display positive and negative effects of the proposed action. A new section added to the body of the statement suggests Federal policy that could be used to offset the adverse environmental effects. Once the statement is prepared, it is considered along with other factors in project decision-making.

c. Responsibilities of Bureau Officials

The following is an outline of prescribed responsibilities by official for compliance with EIS requirements for the BLM:

(1) The Director:

- o Assures Bureau compliance with requirements of the National Environmental Policy Act of 1969, including the preparation and review of environmental statements.
- o Reviews recommendations to prepare statements on major Bureau actions significantly affecting environmental quality, and designates Bureau officials responsible for their preparation.

(2) The Assistant Director, Legislation and Plans:

- o Coordinates development of policies, procedures, and standards for the identification of major Bureau actions significantly affecting environmental quality.
- o Develops Bureau policy, procedures and standards, and coordinates implementation of the Bureau's system for the preparation and review of environmental statements.
- o Provides liaison with the Assistant Secretary, Program Policy and Solicitor regarding the determination of statements to be prepared, and compliance with procedures for preparation and review of statements.

*BLM Instruction Memo 73-40, Proposed Revision of Manual 1792, dated October 10, 1973.

- o Provide liaison with the Assistant Secretary, Program Policy and Solicitor regarding the determination of state-made to be prepared, and compliance with procedures for preparation and review of statement.

- o Develop Bureau policy, procedures and standards, and coordinate implementation of the Bureau system for the preparation and review of environmental statements.

- o Coordinate development of policies, procedures, and standards for the identification of major Bureau actions significantly affecting environmental quality.

(2) The Assistant Director, Legislation and Plans

- o Review recommendations to propose statements on major Bureau actions significantly affecting environmental quality, and coordinate Bureau officials responsible for their preparation.

- o Assist in Bureau compliance with requirements of the National Environmental Policy Act of 1969, including the preparation and review of environmental statements.

(1) The Director

for compliance with EIS requirements for the BLM.

The following is an outline of proposed responsibilities by official

c. Responsibilities of Bureau Officials

decision-making.

ment is prepared, it is considered along with other factors in project

could be used to offset the adverse environmental effects. Once the state-

section added to the body of the statement suggests Federal policy that

now display positive and negative effects of the proposed action. A new

proposed action to existing land use plans, environmental impacts

of the statement has been retained to include the relationship of the

words - major, significant effects, and environmental quality. The body

significance which is located on an action statement of the significance

BLM has revised Manual Section 1982. Included now is a list for

in response to the most recent EIS guidelines (August 1973). The

- o Provides liaison with the Legislative Counsel regarding statements for legislative proposals and reports.
 - o Coordinates Bureau review of environmental statements prepared by other Federal agencies.
 - o Maintains a list of all environmental statements prepared by other Federal Agencies.
 - o Maintains records for all environmental statements prepared by other Federal Agencies for which Bureau review is coordinated by the Washington Office.
 - o Provides for Bureauwide training on procedures for the preparation and review of environmental statements.
- (3) All Assistant Directors, within their areas of responsibility and within the requirements of Bureau systems:
- o Develop policies and standards for the identification of major Bureau actions significantly affecting environmental quality, and for the preparation and review of environmental statements.
 - o In specific cases, recommend the preparation of Bureau environmental statements and assignment of responsibility for preparation.
 - o Assist in the preparation and review of Bureau environmental statements.
 - o Develop procedures for continuing evaluation of environmental impacts.
 - o Maintain records for all Bureau environmental statements prepared under their supervision.
 - o Review environmental statements prepared by other Federal Agencies.
 - o Provide for professional training required for effective analysis of environmental impacts.
- (4) State Directors, Service Center Directors, BLM Director - Boise Interagency Fire Center (BIFC), and Manager, Outer Continental Shelf Office (OCS), with their areas of responsibility:
- o Make environmental analyses of Bureau actions and, in cases where they believe an action may be a major action significantly affecting environmental quality, recommend preparation of an environmental statement.
 - o Prepare Bureau environmental statements when authorized by the Director.

- o Provide Bureau with the Legislative Council regarding statements for legislative proposals and reports.
 - o Coordinate Bureau review of environmental statements prepared by other Federal agencies.
 - o Maintain a list of all environmental statements prepared by other Federal Agencies.
 - o Maintain records for all environmental statements prepared by other Federal Agencies for which Bureau review is requested by the Washington Office.
 - o Provide for Bureauwide training on procedures for the preparation and review of environmental statements.
- (3) As Assistant Director, within their areas of responsibility and within the requirements of Bureau systems:
- o Develop policies and standards for the identification of major Bureau actions significantly affecting environmental quality, and for the preparation and review of environmental statements.
 - o In specific cases, recommend the preparation of Bureau environmental statements and assignment of responsibility for preparation.
 - o Assist in the preparation and review of Bureau environmental statements.
 - o Develop procedures for continuing evaluation of environmental impacts.
 - o Maintain records for all Bureau environmental statements prepared under their supervision.
 - o Review environmental statements prepared by other Federal Agencies.
 - o Provide for professional training required for effective analysis of environmental impacts.
- (4) State Director, Bureau Center Director, ELM Director - Bureau Director, Bureau Center Director, and Manager, Bureau Environmental
- o Make environmental analyses of Bureau actions and, in cases where they believe an action may be a major action significantly affecting environmental quality, recommend preparation of an environmental statement.
 - o Prepare Bureau environmental statements when authorized by the Director.

- o Review environmental statements prepared by other Bureau officials and by other Federal Agencies.
- o Maintain records for all environmental statements prepared under their supervision, and for all environmental statements prepared by other Federal Agencies which receive Bureau review under their supervision.

d. Identification of Actions Requiring Statements

The Bureau has articulated the spectrum of actions which may require the preparation of the environmental statements:

- (1) Recommendation or favorable reports to the Congress relating to legislature. Additionally, the annual budget estimates submitted to the Office Management and Budget specifies those actions which require the preparation of the statement.
- (2) Projects, programs, and continuing activities related to natural or cultural resources including research directly undertaken by the Bureau, supported to any extent by Bureau contract, or involving a Bureau entitlement to use.
- (3) Recommendations or adoption of policies, standards, procedures, regulations, and plans which affect the environment.
- (4) For actions deemed highly controversial or found that appropriate Bureauwide statements do not provide sufficient detail to fully analyze significant environmental impacts, it may be decided to prepare a statement at any of the following stages.
 - o During analysis of certain actions recommended in the management framework plan of the Bureau planning system
 - o During formulation of activity plans
 - o During formulation of program packages
 - o During Annual Work Plan formulation of a project, or of a group of projects which appear to have cumulative or similar environmental impacts in an area with relatively homogenous environmental characteristics
 - o Prior to undertaking an individual action, on Bureau motion or in response to an application
 - o Prior to undertaking or approving a research or experimental study
 - o During preparation of legislative proposals or reports

Review environmental statements prepared by other Bureau officials and by other Federal Agencies.

Maintain records for all environmental statements prepared under their supervision, and for all environmental statements prepared by other Federal Agencies which receive Bureau review under their supervision.

4. Identification of Actions Requiring Statements

The Bureau has identified the spectrum of actions which may require

the preparation of the environmental statements:

- (1) Recommendation or favorable reports to the Congress relating to legislation. Additionally, the annual budget estimates submitted to the Office Management and Budget specifies those actions which require the preparation of the statement.
- (2) Projects, programs, and continuing activities related to natural or cultural resources including research directly undertaken by the Bureau, supported in any extent by Bureau contract, or involving a Bureau employee to use.
- (3) Recommendations or adoption of policies, standards, procedures, regulations, and plans which affect the environment.
- (4) For actions deemed highly controversial or those that require private Bureauwide statements do not provide sufficient detail to fully analyze significant environmental impacts, it may be decided to prepare a statement at any of the following stages:
 - o During analysis of certain actions recommended in the management framework plan of the Bureau planning system.
 - o During formulation of activity plans.
 - o During formulation of program packages.
 - o During Annual Work Plan formulation of a project, or of a group of projects which appear to have cumulative or similar environmental impacts in an area with relatively homogeneous environmental characteristics.
 - o Prior to submission of individual action on Bureau proposal or in response to an application.
 - o Prior to undertaking or approving a research or experimental study.
 - o During preparation of legislative proposals or reports.

e. Determination of Significance

The impacts of an action are to be judged as significant to require preparation of a statement if that action:

- (1) Alters ecological interrelationships or the condition of basic resources.
 - o Affects air quality or water quality.
 - o Takes place on fragile or unstable soils, or on steep slopes.
 - o Affects rare or unique wildlife, vegetation, geologic or other land features.
 - o Alters natural ecosystems.
- (2) Has direct or indirect effect on human well-being.
 - o Occurs in or adjacent to national parks, monuments, historical areas, wilderness areas or wildlife refuges.
 - o Occurs in or adjacent to wild rivers, recreation sites, or other scenic areas.
 - o Effects improvement or causes long-term damage to the visual landscape.
 - o Alleviates or creates conditions hazardous to public safety or health.
 - o Affects existing uses or users.
- (3) Institutes a marked change in resource use, especially changes with irreversible effects.
 - o Introduces a new resource use into a geographic area.
 - o Influences possible future alternative use of the land.
 - o Is consistent or in conflict with multiple use recommendations identified and set forth through the planning system.

f. EIS Content, Review and Public Participation

The Bureau prescribes procedures and instructions that detail the content of the environmental statements, the review procedures for the EIS and the role of public participation. For

Determination of Significance

The impacts of an action are to be judged as significant to require preparation of a statement if that action:

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o Occurs in or adjacent to national parks, monuments, historical areas, wilderness areas or wildlife refuges.

o Occurs in or adjacent to wild rivers, recreation sites, or other scenic areas.

o Effects improvement or causes long-term damage to the visual landscape.

o Alters or creates conditions hazardous to public safety or health.

o Affects existing uses or users.

(3) Involves a marked change in resource use, especially changes with irreversible effects.

o Introduces a new resource use into a geographic area.

o Influences possible future alternative use of the land.

o Is consistent or in conflict with multiple use recommendations identified and set forth through the planning system.

1. EIS Content, Review and Public Participation

The Bureau prescribes procedures and instructions that detail the content of the environmental statements. The review procedures for the EIS and the role of public participation. For

a description of these components, refer to Appendix 1, which contains excerpts from BLM Manual 1792.

The basic EIS format is as follows:

- (1) Cover sheet
- (2) Summary sheet
- (3) Body of Statement
 - (a) Description of the proposal
 - (b) Description of the environment
 - (c) The environmental impact of the proposed action
 - (d) Mitigating measures included in the proposed action
 - (e) Any adverse effects which cannot be avoided should the proposal be implemented
 - (f) The relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity
 - (g) Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented
 - (h) Alternatives to the proposed action
- (4) Consultation and coordination with others
 - (a) Consultation and coordination in the development of the proposal and in the preparation of the draft statement
 - (b) Coordination in the review of the Draft Statement
- (5) Attachments

In the Draft revision of BLM Manual 1792, the body of the statement has been expanded to include (1) the relationship of the proposed action to land use plans, policies and controls for the affected area and (2) Federal policy to offset the adverse effects of the proposed action.

The analysis of environmental impacts for an EIS is similar to that for an EAR. EIS procedures provide for the determination

a description of these components, refer to Appendix I, which contains a copy from EIS Manual 1702.

The basic EIS format is as follows:

- (1) Cover sheet
- (2) Summary sheet
- (3) Body of Statement
 - (a) Description of the proposal
 - (b) Description of the environment
 - (c) The environmental impact of the proposed action
 - (d) Mitigating measures included in the proposed action
 - (e) Any adverse effects which cannot be avoided should the proposal be implemented
 - (f) The relationship between long-term and short-term use of the environment and the importance and relevance of long-term productivity
 - (g) Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented
 - (h) Alternatives to the proposed action
- (4) Consultation and coordination with others
 - (a) Consultation and coordination with the development of the proposal and in the preparation of the draft statement
 - (b) Consultation in the review of the Draft Statement
- (5) Attachments

In the Draft Statement of EIS Manual 1702, the body of the statement has been expanded to include (1) the relationship of the proposed action to land use plans, policies and controls for the affected area and (2) Federal policy to offset the adverse effects of the proposed action.

The analysis of environmental impacts for an EIS is similar to that for an EAR. EIS procedures provide for the determination

of all environmental impacts of the proposed action and alternatives, the subtraction of the effect of mitigating measures to reduce adverse impacts, and the identification of a net residual of adverse effects which cannot be eliminated, so that the environmental benefits, costs and risks for the proposed action and alternatives can be compared.

g. EIS Flow and Function Charts

(1) EIS Flow Chart

The accompanying flowchart signifies sequentially the steps necessary to prepare an Environmental Statement. In addition to the direction of flow, the diagram briefly describes each step, indicates the responsible personnel involved, and designates points of decision making. The diagram has been developed to graphically illustrate the process for statements prepared at any level or office of the BLM. The flow chart makes reference to the Environmental Analysis Record which can be located for explanation in a previous component of this system operation section; otherwise, the chart is fairly straightforward.

(2) EIS Function Charts

Charts I and II identify the functions, responsibilities and roles of BLM personnel, USDI personnel, CEQ, Federal, State and local agencies and public/private groups and persons in the preparation of an environment impact statement by the Washington office and offices other than the Washington office, respectively. These charts complement the aforementioned EIS flow charts and serve as an abbreviated summation of the EIS process.

of all environmental impacts of the proposed action and alternatives, the estimation of the effect of mitigating measures to reduce adverse impacts, and the identification of a set of measures to avoid, minimize, or compensate for adverse effects which cannot be eliminated, so that the environmental benefits, costs and risks for the proposed action and alternatives can be compared.

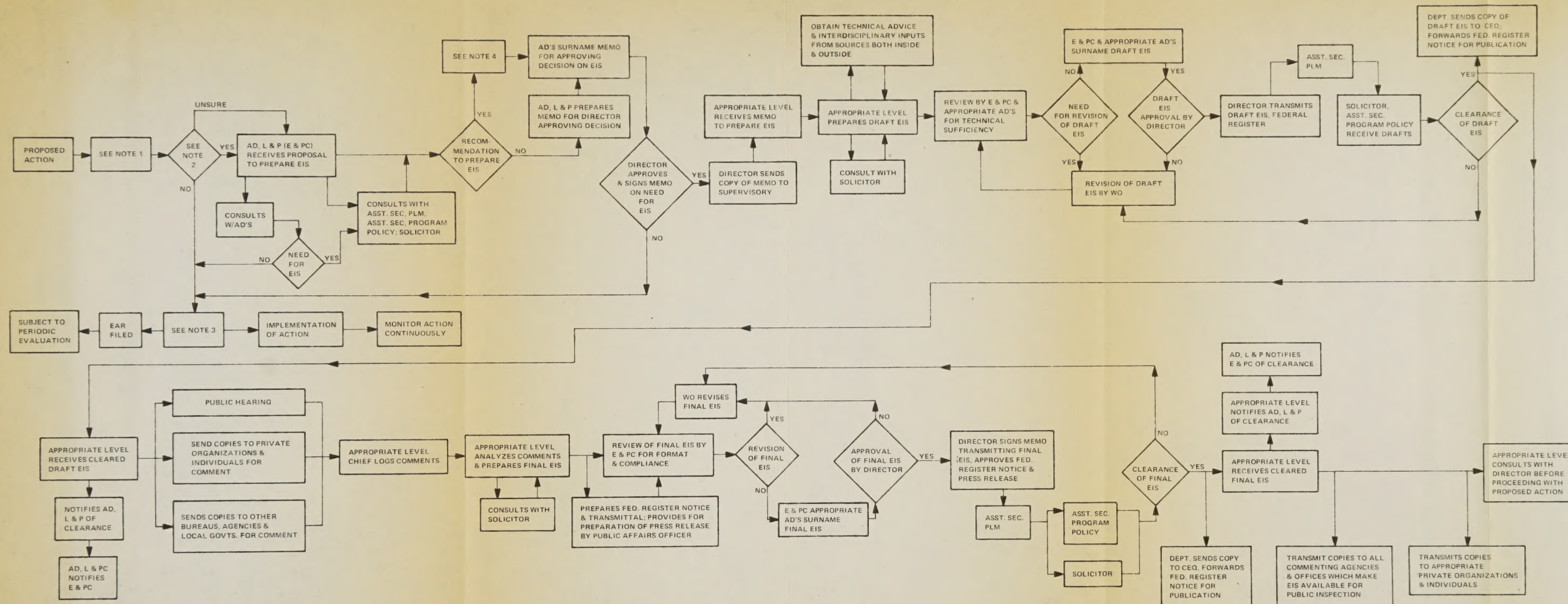
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(2) EIS Function Charts

Charts I and II identify the functions, responsibilities, and roles of BLM personnel, FWS personnel, CDF, Federal, State and local agencies and public/private groups and persons in the preparation of an environmental impact statement by the Washington office and offices other than the Washington office, respectively. These charts complement the aforementioned EIS flow charts and serve as an abbreviated summation of the EIS process.



- NOTE 1**
 At WO, corresponding Division Chief prepares EAR.
 At Service Center, Division Chief or Leader prepares EAR.
 At State Office, Division Chief prepares EAR.
 At District Office, RAM prepares EAR.
- NOTE 2**
 At WO, Division Chief & Supv. AD recommend preparation of EIS.
 At Service Center, SCD concurs on need for EIS.
 At State Office, SD concurs on need for EIS.
 At District Office, DM concurs on need for EIS.
- NOTE 3**
 At WO, documents returned to Division Chief and reflected in decision.
 At Service Center, documents returned to Division Chief or Leader and incorporated in decision.
 At SO, documents returned to Division Chief and incorporated in decision.
 At District Office, documents returned to RAM and incorporated in decision.
- NOTE 4**
 "Appropriate level" is the responsible official at that level, district, state office, service center, or Washington office, which initiated the EAR.

EIS FLOW PROCESS

**BUREAU OF LAND MANAGEMENT (BLM)
EIS PREPARED BY OFFICES
OTHER THAN WASHINGTON OFFICE**

A C T I O N S

	Preliminary				Draft EIS										Final EIS									
	Provides for interdisciplinary env't. analysis; proposes EIS need identifies lead W.O. for coordination	Surnames memo on EIS need	Decision: Approves memo on need for EIS	Receives notification of approval for EIS preparation	Prepares draft EIS & forwards	Circulates draft EIS for review for comments	Revises draft EIS & circulates surname & approval	Receives draft EIS for major revisions	Surnames draft EIS	Approves draft EIS & forwards for clearance	Clears draft EIS	Receives draft EIS	Receives draft EIS clearance; reproduces & circulates for review comments	Revises draft EIS & submits EIS for review	Reviews final EIS & circulates final comments	Revises final EIS & submits surname and approval	Surnames final EIS	Approves final EIS & forwards for dept. clearance	Clears final EIS	Receives final EIS	Reproduces final EIS & transmits to all commenting agencies	Receives final EIS	Consults prior to proceeding with action	
CEO												●		●							●			
EPA														●								●		
Secretary, Dept. of Interior																								
Asst. Sec. Program Policy	▲											●								●				
Solicitor	▲										▲									▲				
Asst. Sec. Public Land Mgt.	▲										■									■				
Bureau of Land Mgt., Dir.			●							●									●				▲	
Ad Legislation & Plans	▲			■		■							■		■		■			■				
E & PC			*			●			●				*		●		●			*				
Asst. Directors (Ad)	●	●				■			●						■		●							
Coordinating W.O.					●	●	●					●		●	●					●				
State Dir./Service Ctr. Dir.	●		●	●				●	●				●	●							●		●	
Field Solicitor					▲									▲										
Div. Chiefs						●									●									
Federal/State/Local Agencies													●									●		
Public/Private Groups/Persons													●									●		
Public Hearing (as necessary)													●											

ACTIONS

● MAJOR RESPONSIBILITY FOR ACTION

▲ CONSULTED

■ SENT THROUGH

✱ INFORMED

CEQ

EPA

DEPT. OF INTERIOR, SECRETARY

ASST. SEC. PROGRAM POLICY

SOLICITOR

ASST. SEC. LAND & WATER RESOURCES

DIRECTOR/ASSOCIATE DIR, BLM

AD LEGISLATION & PLANS

ENVIRONMENTAL & PLNG COORDINATION

ASST. DIRECTORS (AD)

SUPERVISORY AD

LEAD DIVISION CHIEF/TASK FORCE

DIVISION CHIEF

FEDERAL AGENCIES

STATE/LOCAL AGENCIES

PUBLIC, STATE GROUPS & PERSONS

PUBLIC HEARING

ACTION	PRELIMINARY										DRAFT EIS										FINAL EIS									
	PROVIDES FOR INTERDISCIPLINARY ENVIR. ANALYSIS; PROPOSES EIR NEED	IDENTIFIES EIS NEED - MEMO; SURNAME'S MEMO ON EIS NEED	DECISION: APPROVES MEMO; NEED FOR EIS	RECEIVES NOTIFICATION OF APPROVAL FOR EIS PREPARATION	PREPARES DRAFT EIS & CIRCULATES FOR INTERNAL REVIEW	REVISES DRAFT EIS & COMMENTS FOR SUBMITTAL	SURNAME'S DRAFT EIS & SUBMITTAL	APPROVES DRAFT EIS & CIRCULATES FOR CLEARANCE	CLEAR DRAFT EIS	RECEIVES DRAFT EIS	RECEIVES DEPT. EIS; REPRODUCES & CIRCULATES FOR REVIEW	REVISES DRAFT EIS & CIRCULATES FOR REVIEW	REVIEWS DRAFT EIS & CIRCULATES FOR REVIEW	REVISES FINAL EIS & CIRCULATES FOR SUBMITTAL	SURNAME'S FINAL EIS & SUBMITTAL	APPROVES FINAL EIS & CIRCULATES FOR DEPT. CLEARANCE	CLEAR FINAL EIS	RECEIVES FINAL EIS & FORWARDS	RECEIVES DEPT. CLEARANCE OF FINAL EIS; REPRODUCES & CIRCULATES	REVISES FINAL EIS	CONSULTS PERIOD TO PROCEEDING WITH ACTION									
						</																								

h. Outputs of the EIS Process

As previously mentioned in the Environmental Analysis Process section, the EAR procedures are fully operational and utilized in BLM field offices which have produced a large and increasing number of EAR's. Of these EAR documents, only a very few recommend preparation of an EIS. Since the passage of NEPA in 1970, the BLM has submitted to CEQ a total of only 13 statements, three of which currently have draft status. At present, the CEQ has the following BLM statements on file:

Draft EIS

- (1) Fort Mohave Land Transfer
- (2) Planet Townsite Land Exchange
- (3) 1974 OCS Oil and Gas Sale, Louisiana

Final EIS

- (1) Phosphate Mining, Los Padres National Forest
- (2) 1971 Oil and Gas Lease Sale, Louisiana
- (3) OCS Oil and Gas Lease, Louisiana, Supplement
- (4) OCS Oil and Gas Lease Sale
- (5) Outer Continental Shelf
- (6) Oil and Gas Lease Sale
- (7) Jim Bridger Thermal-Electric Complex
- (8) OCS Oil and Gas Sale, Texas
- (9) Wild Free-Roaming Horse and Burro Management
- (10) Oil and Gas Lease Sale, Fall 1973

It should be pointed out that not all BLM EIS documents have resulted from EAR recommendations. Although the Bureau has not yet determined the specific types and classes of action which would require an EIS, the BLM

The project is located in the Environmental Analysis Project. As previously mentioned, the EIS process is a fairly open and public one. In the EIS process, which has produced a large and increasing number of EIS's. Of these EIS documents, only a very few have been submitted to the EIS. Since the passage of NEPA in 1969, the EIS has submitted to EIS a total of only 12 EIS's. The EIS's of which currently have draft status. At present, the EIS's are the following EIS's submitted on file:

1971-1973

- (1) Fort Wayne Land Transfer
- (2) Fort Wayne Land Exchange
- (3) Fort Wayne Land Sale, Louisiana

1974-1975

- (1) Fort Wayne Land Sale, Louisiana
- (2) Fort Wayne Land Sale, Louisiana
- (3) Fort Wayne Land Sale, Louisiana
- (4) Fort Wayne Land Sale, Louisiana
- (5) Fort Wayne Land Sale, Louisiana
- (6) Fort Wayne Land Sale, Louisiana
- (7) Fort Wayne Land Sale, Louisiana
- (8) Fort Wayne Land Sale, Louisiana
- (9) Fort Wayne Land Sale, Louisiana
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- (96) Fort Wayne Land Sale, Louisiana
- (97) Fort Wayne Land Sale, Louisiana
- (98) Fort Wayne Land Sale, Louisiana
- (99) Fort Wayne Land Sale, Louisiana
- (100) Fort Wayne Land Sale, Louisiana

It should be pointed out that not all EIS documents have resulted from EIS recommendations. Although the EIS process has not yet determined the specific types and number of actions which would require an EIS, the EIS

has produced environmental statements without first preparing EAR's. In these instances, there existed little, if any, doubt that the type and scope of actions automatically demanded an EIS.

In addition to those EIS documents filed with CEQ, the BLM is processing the following environmental statements:*

PROGRAMMATIC EIS

(1) Minerals:

- (a) Upland Oil and Gas Leasing
- (b) Coal
- (c) Oil Shale
- (d) Geothermal Steam

(2) Watershed:

- (a) Pinion-Juniper Chaining
- (b) Chemical Pesticides
- (c) Mechanical Vegetative Practices
- (d) Watershed Program

(3) Planning:

- (a) BLM Planning System

(4) Range:

- (a) Grazing Management

(5) Forestry:

- (a) Timber Management Program

(6) Fire Control:

- (a) Fire Management Program

*BLM Information Memo No. 73-112 of May 2, 1973; Status of Environmental Impact Statements. This list does not include multi-agency EIS's in which the BLM participated, but not as the lead agency.

has produced environmental statements without first preparing EIS. In these instances, there existed little, if any, doubt that the type and scope of actions environmentally demanded as

EIS.

In addition to those EIS documents filed with CBO, the BLM is processing the following environmental statements:

PROGRAMMATIC EIS

- (1) Minerals:
 - (a) Offshore Oil and Gas Leasing
 - (b) Coal
 - (c) Oil Shale
 - (d) Geothermal Steam
- (2) Watersheds:
 - (a) Pesticide-Resistant Chaining
 - (b) Chemical Pesticides
 - (c) Mechanical Vegetative Practices
 - (d) Watershed Program
- (3) Planning:
 - (a) BLM Planning System
- (4) Range:
 - (a) Grazing Management
- (5) Forestry:
 - (a) Timber Management Program
- (6) Fire Control:
 - (a) Fire Management Program

BLM Information Report No. 73-115 of May 2, 1973; States of Environmental Impact Statements. This has been not include multi-agency EIS's in which the BLM participated, but not as the lead agency.

LEGISLATION AND REGULATORY

- (1) Chemical Toxicants
- (2) OCS Hardrock Mineral Leasing
- (3) OV Regulations

INDIVIDUAL ACTIONS

- (1) Deep Well Injection
- (2) Red Rock Canyon Recreation Plan
- (3) Phosphate Lease, Osceola N.F.
- (4) Big Butte Timber Sale
- (5) Pesticide Container Disposal
- (6) Tucson Gas and Electric, 345 KV Line
- (7) Public Land Sale - Clark County, Nevada
- (8) MAFLA OCS Oil and Gas Lease Sale
- (9) Oil and Gas Lease Sale, Oregon

CASE STUDY ACTION

LOCATION

Grading Allotment Mgmt. Plan

Billings District, Montana

Rights-of-way Access for
Coal Strip Mining

Hawkins District, Wyoming

Rights-of-way, Power
Transmission Lines

Utah State Office, Utah

MPP's Land Exchanges

Redding District, California

Timber Management

Flagstaff District, Oregon

MAFLA-MPP Process
(Environmental Profiles)

Carson City District, Nevada

EXHIBITION AND RECITAL

- (1) Chemical Treatment
- (2) Gas Hardrock Mineral Leasing
- (3) Oil Regulations

INDIVIDUAL ACTIONS

- (1) Deep Well Injection
- (2) Red Rock Canyon Recreation Plan
- (3) Phosphate Leases, Goshute N.E.
- (4) Big Butte Timber Sale
- (5) Petroleum Container Disposal
- (6) Tractor Gas and Electric, 344 EV Lane
- (7) Public Land Sale - Clark County, Nevada
- (8) MAT/A OCS Oil and Gas Lease Sale
- (9) Oil and Gas Lease Sale, Oregon

C. BLM CASE STUDIES

At the outset of the NEPA Process Study, VTN staff members reviewed pertinent Departmental and Bureau manuals, directives, instructions, etc. in order to attain a working knowledge of BLM systems and its operations. This review was acknowledged to be limited, since it primarily covered procedural and static information. This initial examination produced a number of unanswered questions and significant issues pertaining to the planning, resource management and decision making processes of the Bureau. The resolution of these questions and issues necessitated case study work in the field.

The discussion in this section is presented in two parts. In the first part the case studies focus on the following specific actions conducted in the field:

<u>CASE STUDY ACTION</u>	<u>LOCATION</u>
Grazing Allotment Mgmt. Plan	Billings District, Montana
Rights-of-way Access for Coal Strip Mining	Rawlins District, Wyoming
Rights-of-way, Power Transmission Lines	Utah State Office, Utah
MFP& Land Exchanges	Redding District, California
Timber Management	Eugene District, Oregon
URA-MFP Process (Environmental Profile)	Carson City District, Nevada

The objective of these case studies is to provide supplemental information to aid the evaluation of the influence of NEPA on the decision-making process of the BLM. Data gathered from the case studies track the decision making process and identify the stages

C. BLM CASE STUDIES

At the outset of the NEPA Process Study, VTR staff members reviewed pertinent Departmental and Bureau manuals, directives, instructions, etc. in order to attain a working knowledge of BLM systems and its operations. This review was acknowledged to be limited, since it primarily covered procedural and static information. This initial examination produced a number of unanswered questions and significant issues pertaining to the planning, resource management and decision making processes of the Bureau. The resolution of these questions and issues necessitated case study work in the field. The discussion in this section is presented in two parts. In the first part the case studies focus on the following specific actions conducted in the field:

LOCATION	CASE STUDY ACTION
Billings District, Montana	Grazing Adjustment Mgmt. Plan
Lawrence District, Wyoming	Rights-of-way Access for Coal Strip Mining
Utah State Office, Utah	Rights-of-way, Power Transmission Lines
Redding District, California	NEPA Land Exchange
Prineville District, Oregon	Timber Management
Carson City District, Nevada	BRA-MRP Process (Environmental Profile)

The objective of these case studies is to provide supplemental information to aid the evaluation of the influence of NEPA on the decision-making process of the BLM. Data gathered from the case studies track the decision making process and identify the stages

at which environmental issues were incorporated into the land use planning system. Each case study analysis in this first part describes the action, its resource and management objectives, issues and related problems, the role of the EAR and EIS, and the resultant action.

The second part presents for each field office examined a summary of findings which may be directly related to the planning system and the purpose of this NEPA Process Study.

Before proceeding with the case study discussions, the rationale for selecting the case studies should be explained. In July 1973, the Washington Office of the BLM requested from State Directors case study nominations on the following topics: timber management; mineral leasing; grazing; land tenure; recreation; watershed; and projects.

From all nominations received, staff members from the BLM Washington Office, VTN and CEQ selected six case study actions. In accordance with the following criteria, the selected actions must:

1. be non-controversial and not under litigation;
2. reflect normal, rather than unique, field operations of the Bureau;
3. represent typical, but significant examples of land use/resource management actions;
4. represent a cross section of the BLM land types and geographic coverage (e.g. forest land in Oregon, grazing land in Montana, etc.);
5. have adequate data and information available;
6. involve areas of land with multiple land use and resource management alternatives, from which issues and conflicts require identification and employment of multiple-use decision factors;
7. have a level of significance that can be related to NEPA requirements and objectives.

at which environmental issues were incorporated into the land use planning system. Each case study analysis in this first part describes the action, its resource and management objectives, issues and related problems, the role of the BLM and BLS, and the resultant action.

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Before proceeding with the case study discussions, the rationale for selecting the case studies should be explained. In July 1973, the Washington Office of the BLM requested from State Directors case study nominations of the following topics: timber management; mineral leasing; grazing; land tenure; recreation; watershed; and projects.

From all nominations received, staff members from the BLM Washington Office, WFO and CWO selected six case study actions. In accordance with the following criteria, the selected actions must:

1. be non-controversial and not under litigation;
2. reflect normal, rather than unique, field operations of the Bureau;
3. represent typical, but significant examples of land use resource management actions;
4. represent a cross section of the BLM land types and geographic coverage (e.g. forest land in Oregon, grazing land in Montana, etc.);
5. have adequate data and information available;
6. involve areas of land with multiple land use and resource management alternatives, from which issues and conflicts require identification and development of multiple-use decision factors;
7. have a level of significance that can be related to NEPA requirements and objectives.

PART 1: CASE STUDY ACTIONS

CASE STUDY I
GROVE CREEK GRAZING ALLOTMENT MANAGEMENT PLAN
BILLINGS DISTRICT, MONTANA

A. Description

The Grove Creek Allotment lies approximately 7 miles southwest of Belfry, Montana, and is bounded by Custer National Forest on the west, the Wyoming-Montana state line on the south, Clarks Fork of the Yellowstone River Valley on the east and Grove Creek on the north (Refer to BLM Plate 5). By definition, an allotment is an area designated for grazing use, which may contain several use areas or pastures and may be used by one or more livestock operations. An Allotment Management Plan (AMP) is a concisely written program of action (or Program Activity Plan) designed to reach specific management goals. The AMP objectives are (1) to establish a grazing management program which obtains and sustains stable soil and watershed conditions and dependable supply of forage in balance with other multiple uses, and (2) to provide continuity to the range management program.

B. Resource/Management Objectives

The Grove Creek allotment is located within the Red Lodge Planning Unit for which the URA, MFP and AMP documents have been completed. The Grove Creek AMP is constrained and guided by the Red Lodge MFP, and its stated objectives are:

1. to increase forage production in quantity and quality;
2. to decrease the rate of wind and water erosion from moderate to slight;
3. to improve the vigor and reproduction of browse species for wildlife.

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 Denver Federal Center
 BLM Library

and the

3. to improve the vigor and reproduction of prairie species for to slight;
5. to decrease the rate of wind and water erosion from moderate
1. to increase forage production in quantity and quality;

and its stated objectives are:

The Grove Creek AMF is contained and guided by the Red Lodge MFP, Unit for which the PEV, MFP and AMF documents have been completed.

The Grove Creek allotment is located within the Red Lodge Planning

B. Resource Management Objectives

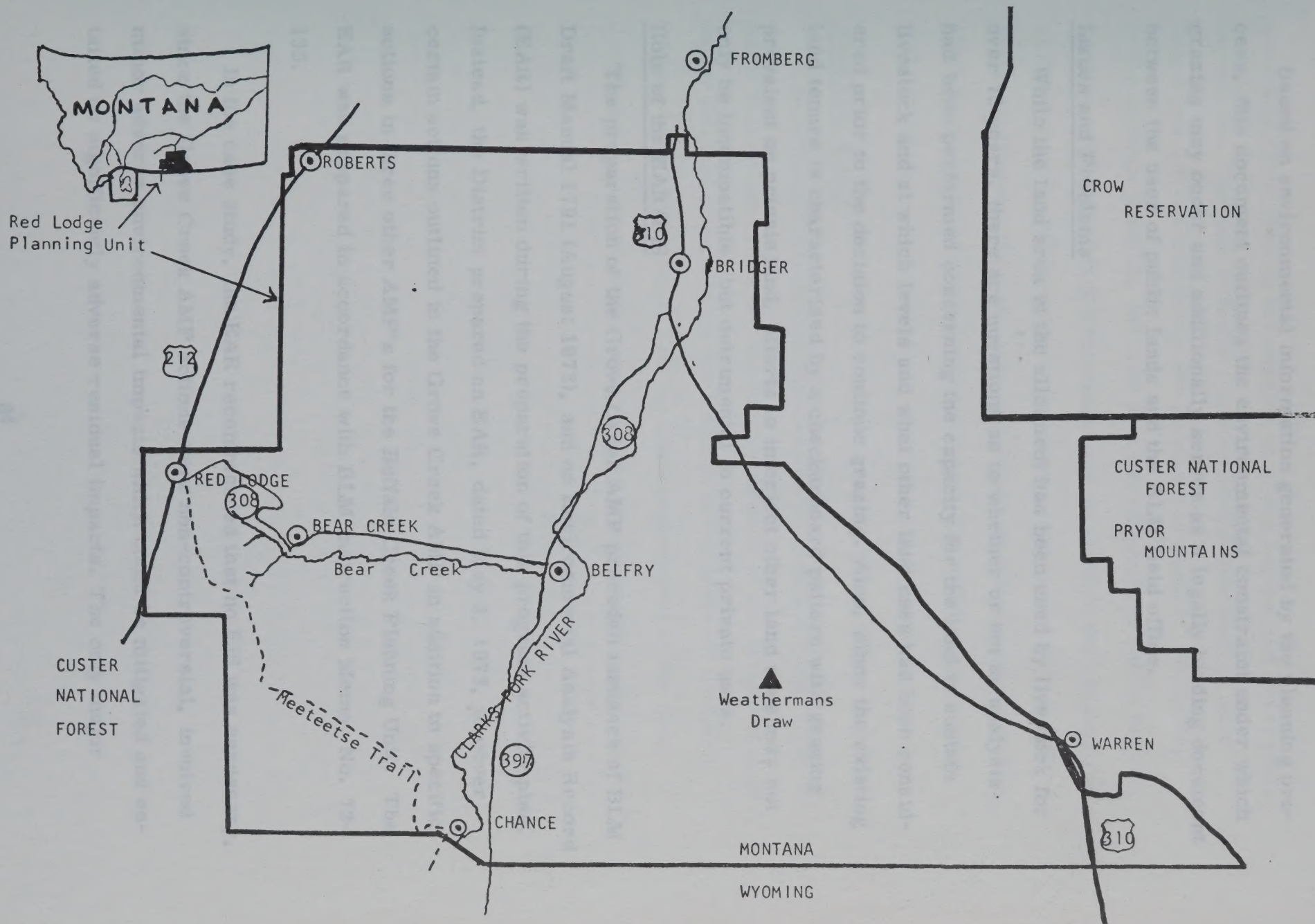
- (2) to provide continuity to the range management program, dependable supply of forage in balance with other multiple uses, and which obtains and sustains stable soil and water shed conditions and
- The AMF objectives are (1) to establish a grazing management program Program Activity Plan) designed to reach specific management goals.

Management Plan (AMF) is a concisely written program of action (or and may be used by one or more livestock operations. An Allotment nated for grazing use, which may contain several use areas or pastures (Refer to BLM Plate 2). By definition, an allotment is an area designated by the Yellowstone River Valley on the east and Grove Creek on the north west, the Wyoming-Montana state line on the south, Clark Fork of of Belly, Montana, and is bounded by Chester National Forest on the The Grove Creek Allotment lies approximately 7 miles southwest

A. Description

BLMINGS DISTRICT, MONTANA
 GROVE CREEK GRAZING ALLOTMENT MANAGEMENT PLAN
 CASE STUDY I

RED LODGE PLANNING UNIT IN
THE BILLINGS DISTRICT MONTANA



Based on environmental information generated by the planning process, this document outlines the environmental constraint under which grazing may occur and additionally serves as a legally binding document between the user of public lands and the BLM field office.

C. Issues and Problems

While the land area in the allotment has been used by livestock for over 70 years, there are questions as to whether or not an analysis had been performed concerning the capacity for the land to sustain livestock and at which levels and what other land uses had been considered prior to the decision to continue grazing. Also, since the existing land tenure is characterized by a checkerboard pattern with grazing prevalent on private land, efforts to interject other land uses may not only be incompatible, but detrimental to current private uses.

Role of the EAR/EIS

The preparation of the Grove Creek AMP preceded issuance of BLM Draft Manual 1791 (August 1973), and no Environmental Analysis Record (EAR) was written during the preparation of this program activity plan. Instead, the District prepared an EAR, dated May 3, 1973, to cover certain actions outlined in the Grove Creek AMP in addition to specific actions in three other AMP's for the Buffalo Creek Planning Unit. The EAR was prepared in accordance with BLM Instruction Memo. No. 72-135.

In the case study, the EAR recommended that no EIS was necessary, since the Grove Creek AMP actions were non-controversial, involved minor adverse environmental impacts which could be mitigated and entailed no significantly adverse residual impacts. The only major

Based on environmental information generated by the planning process, this document outlines the environmental concerns under which grazing may occur and additionally serves as a legally binding document between the rest of public lands and the BLM field office.

C. Issues and Problems

While the land area in the alignment has been used by livestock for over 70 years, there are questions as to whether or not an analysis had been performed concerning the capacity for the land to sustain livestock and at what levels and what other land uses had been considered prior to the decision to continue grazing. Also, since the existing land tenure is characterized by a checkerboard pattern with grazing prevalent on private land, efforts to interject other land uses may not only be incongruous, but detrimental to current private uses.

Role of the EARS

The preparation of the Grove Creek AMP preceded issuance of BLM Draft Manual 1741 (August 1975), and an Environmental Analysis Record (EAR) was written during the preparation of this program activity plan. Instead, the District prepared an EAR, dated May 8, 1978, to cover certain actions outlined in the Grove Creek AMP in addition to specific actions in three other AMPs for the Buffalo Creek Planning Unit. The EAR was prepared in accordance with BLM Instruction Memo No. 12-127.

In the case study, the EAR recommended that no EIS was necessary, since the Grove Creek AMP actions were non-controversial, involved minor adverse environmental impacts which could be mitigated and evaluated as significantly adverse residual impacts. The only major

weakness of the EAR is the absence of public review and interagency comments. Although formally required by EIS procedures, such comments are not mandatory for inclusion in an EAR. According to the Billings District, the EAR was not subjected to public hearing because public input had been sought and obtained in the preparation of the Red Lodge MFP, from which evolved the Grove Creek AMP. Since the District Manager determined that an EIS was unnecessary, the EAR was not forwarded to the Montana State Office for review and comment.

E. Resultant Action

The Billings District has approved both the Grove Creek Allotment Management Plan and the implementation of the actions included in the EAR document. Since the EAR did not address all proposed actions in the AMP and no EAR or EIS was prepared on the Red Lodge MFP, the remaining actions to be implemented require an EAR.

weakness of the EAR in the absence of public review and interagency comments. Although formally required by EIS procedures, such comments are not mandatory for inclusion in an EAR. According to the Billings District, the EAR was not subjected to public hearing because public input had been sought and obtained in the preparation of the Red Lodge MFP, from which evolved the Grove Creek AMP. Since the District Manager determined that an EIS was unnecessary, the EAR was not forwarded to the Montana State Office for review and comment.

E. Revised Action

The Billings District has approved both the Grove Creek Action Management Plan and the implementation of the actions included in the EAR document. Since the EAR did not address all proposed actions in the AMP and no EAR or EIS was prepared on the Red Lodge MFP, the remaining actions to be implemented require an EAR.

CASE STUDY II
MEDICINE BOW COAL COMPANY, ROAD & POWERLINE
RIGHTS-OF-WAY APPLICATION
RAWLINS DISTRICT, WYOMING

A. Description

The case study action concerns a coal company's application with the BLM for rights-of-way across Federal public land.

The Medicine Bow Coal Company (a joint venture of Union Pacific Corporation and Arch Mineral Corporation) proposes to strip mine for coal on private land located 120 miles northwest of Cheyenne, Wyoming. The mine is expected to produce three million tons of low sulphur coal annually over a 10 year span. Contracts have already been negotiated with several midwestern electric power companies, and coal delivery has been scheduled to begin in mid-1974. Ownership of the private land presents no serious problem to the coal company, since Union Pacific maintains ownership of both land and mineral rights. However, the local area is characterized by a checkerboard pattern of Federal and private land ownerships, and coal deposits overlap with BLM administered public lands. Future plans of the coal company include application for a mineral rights lease on public land from the BLM. If the coal company cannot obtain a Federal mineral rights lease for use of public land, the mining operation on its own private land nevertheless remains economically feasible, but less has remunerative. Of greater concern, the Medicine Bow Coal Company must first secure rights-of-way over BLM lands for access to and use of its land, before it can do anything, including strip mining operations.

CASE STUDY II
MEDICINE BOW COAL COMPANY, ROAD & POWERLINE
RIGHTS-OF-WAY APPLICATION
HAWAIIAN DISTRICT, WYOMING

A. Description

The case study action concerns a coal company's application with the BLM for rights-of-way across Federal public land.

The Medicine Bow Coal Company is a joint venture of Union Pacific Corporation and Arco Mineral Corporation, proposed to strip mine for coal on private land located 120 miles northwest of Cheyenne, Wyoming. The mine is expected to produce three million tons of low-sulfur coal annually over a 10-year span. Contracts have already been negotiated with several independent electric power companies, and coal delivery has been scheduled to begin in mid-1974. Ownership of the private land presents no serious problem to the coal company, since Union Pacific maintains ownership of both land and mineral rights. However, the local area is characterized by a checkerboard pattern of Federal and private land ownership, and coal deposits overlap with BLM administered public lands. Future plans of the coal company include application for a mineral rights lease on public land from the BLM. If the coal company cannot obtain a Federal mineral rights lease for use of public land, the mining operation on its own private land nevertheless remains economically feasible, but less profitable. Of greater concern, the Medicine Bow Coal Company must first secure rights-of-way over BLM lands for access to and use of its land, before it can do anything, including strip mining operations.

B. Resource/Management Objectives

In the case study, the BLM lands involved lie within the Hanna Planning Unit of the Medicine Bow Resource Area (Refer to BLM Plate 6) As of September 1973, the Rawlins District had completed the Unit Resource Analysis and only Step 1 of the Management Framework Plan for the unit. Since the case study action is neither guided nor constrained by a completed MFP or program activity plan, this particular rights-of-way application represents an individual action in the District's on-going operation. Thus, in the absence of requisite planning documents, the district's response to the proposed action was the preparation of an EAR to insure the integrity of the environment.

C. Issues and Problems

In determining whether or not to grant the rights-of-way application, the Rawlins District anticipated that it could not base its decision solely on the potential impacts of a road and powerline across its lands. The District realized that the major consequences of granting such a rights-of-way included coal strip mining and its accompanying potential impacts on the local environment, including both public and private lands. Given the checkerboard land ownership pattern, the District foresaw serious land use/resource management problems. If the coal company were granted the rights-of-way, it would begin strip mining operations immediately. The BLM parcels adjacent to the coal company's land would be impacted and in some instances isolated and surrounded by strip mining pits. What value would these affected BLM lands have in the District's overall planning and management? What are the

in the District, a valuable business and manufacturing area. The
 city and county have been the main source of the
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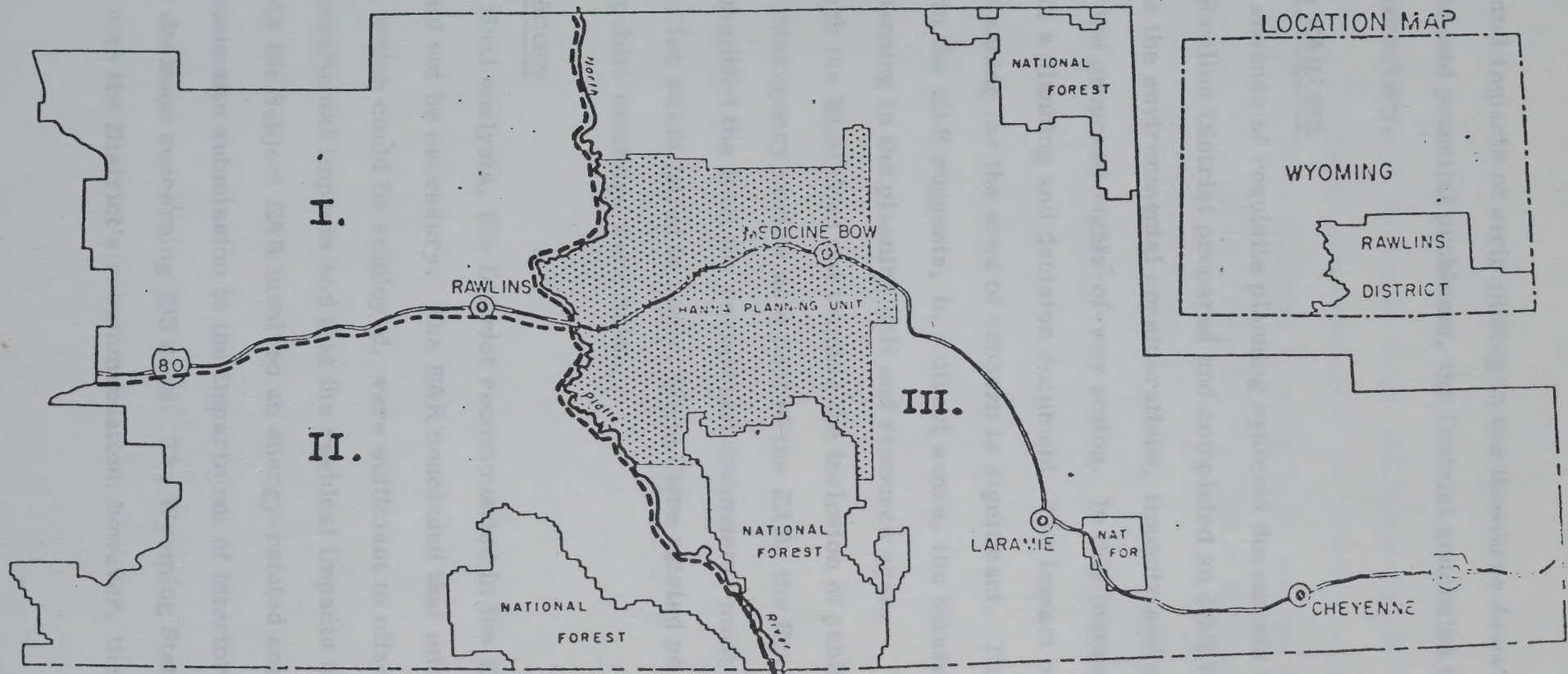
County and District

County

The county is a valuable business and manufacturing area. The
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County and District

BUREAU OF LAND MANAGEMENT
RAWLINS DISTRICT, WYOMING



RESOURCE AREAS: I. Great Divide
II. Baggs
III. Medicine Bow

BLM PLATE 6

environmental impacts of strip mining in the Resource Area? Given these issues and potential problems, the District concluded that an EAR was necessary.

D. Role of the EAR/ EIS

In the absence of requisite planning systems documents for the area, the Rawlins District prepared and completed an EAR to cover and analyze the environmental considerations, impacts and consequences of the proposed rights-of-way action. In this instance, the EAR is both a planning and decision document. The impact of this EAR on future planning for the area of concern is significant. The position advocated in the EAR suggests, in a direct sense, the nature of future land use planning in the planning unit and resource area.

Although the BLM does not require the inclusion of public comments and interagency review as a part of the EAR, the Rawlins District submitted the EAR for review and comments, most notably, the Sierra Club which failed to reply. Since there existed no controversy, no public meetings were held.

E. Resultant Action

In the final analysis, the District recommended in the EAR that an EIS would not be necessary. The EAR concluded that mitigating measures, which could be employed, were sufficient to offset the adverse environmental impacts and that the residual impacts were insignificant. As the Subject EAR involved an energy-related action, it required automatic submission to the Department of Interior for review and a final decision concerning EIS need. The Wyoming State Office concurred with the District's recommendation; however, the Assistant

environmental impacts of strip mining in the Resource Area. Given those facts and potential problems, the District concluded that an EIS was necessary.

Role of the EIS

In the absence of regulatory planning systems documents for the area, the Planning District prepared and completed an EIS to cover and analyze the environmental considerations, impacts and consequences of the proposed right-of-way action. In this instance, the EIS is both a planning and decision document. The impact of this EIS on future planning for the area of concern is significant. The position advocated in the EIS suggests, in a direct sense, the nature of future land use planning in the planning unit and resource area.

Although the BLM does not require the inclusion of public comments and interagency review as a part of the EIS, the Planning District submitted the EIS for review and comments, most notably, the State of Idaho which failed to reply. Since there existed no controversy, no public meetings were held.

Final Action

In the final analysis, the District recommended in the EIS that an EIS would not be necessary. The EIS concluded that mitigating measures, which could be employed, were sufficient to offset the adverse environmental impacts and that the residual impacts were insignificant. As the subject EIS involved an energy-related action, it required automatic submission to the Department of Interior for review and a final decision concerning EIS needs. The Wyoming State Office concurred with the District's recommendation; however, the Assistant

Secretary, Lands and Water Resources, of the Department of Interior determined that the EAR was inadequate and that an EIS would be required. As a result of this decision, which was received during the week VTN conducted this case study, the District was directed to prepare an EIS within a specified 12 month span, and the rights-of-way application from the coal company was held in abeyance until completion and finalization of the EIS.

The Huntington Canyon Generating Station is under construction by the Utah Power and Light Company, and plans have been advanced to accommodate expansion. Current plans indicate an eventual 2000-MW plant at the site which would be constructed in four stages. Each of the four units will generate enough electricity for a residential population between 300,000 to 500,000 residents. If all four units should be built, the station would produce power for 1.2 to 2 million residents.

Construction of the first 430-MW Unit began in March 1971 and was more than 85% complete by the time the accompanying EIS was filed in May 1973. Because the planning for the station was initiated during the late 1960's and preceded the passage of NEPA, an environmental impact statement could not have been prepared before the allocation of construction funds. Consequently, the EIS prepared for the first unit was filed to fulfill the legal requirements of NEPA. This first unit is scheduled to be operational in 1976.

The second unit of the Huntington plant has been proposed for construction by UP&L. It would be identical and adjacent to the first 430-MW unit and would require the construction of an additional 345-KV transmission line to be built from the plant to a site about 154 miles south of Salt Lake City. From this substation the power

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way application from the coal company was held in abeyance until
completion and finalization of the EIS.

CASE STUDY III
HUNTINGTON CANYON GENERATING STATION
AND TRANSMISSION LINES
UTAH STATE OFFICE

A. Case Study Description

Situated in Emery County, Utah, approximately 29 miles by road southwest of Price, Utah, (Refer to BLM Plate 7), a thermal-electric generating station known as the Huntington Canyon Generating Station is under construction by the Utah Power and Light Company, and plans have been advanced to accommodate expansion. Current plans indicate an eventual 2000-MW plant at the site which would be constructed in four stages. Each of the four units will generate enough electricity for a residential population between 300,000 to 500,000 residents. If all four units should be built, the station would produce power for 1.2 to 2 million residents.

Construction of the first 430-MW Unit began in March 1971 and was more than 8% complete by the time the accompanying EIS was filed in May 1972. Because the planning for the station was initiated during the late 1960's and preceded the passage of NEPA, an environmental impact statement could not have been prepared before the allocation of construction funds. Consequently, the EIS prepared for the first unit was filed to fulfill the legal requirements of NEPA. This first unit is scheduled to be operational in 1974.

The second unit of the Huntington plant has been proposed for construction by UP&L. It would be identical and adjacent to the first 430-MW unit and would require the construction of an additional 345-KV transmission line to be built from the plant to a site about 154 miles south of Salt Lake City. From this substation the power

CASE STUDY IN
HUNTINGTON CANYON GENERATING STATION
AND TRANSMISSION LINES
UTAH STATE OFFICE

Case Study Description

Located in Kane County, Utah, approximately 28 miles by road southwest of Panguitch, Utah (Refer to BLM Plate 1), a thermal-electric generating station known as the Huntington Canyon Generating Station is under construction by the Utah Power and Light Company, and plans have been advanced to accommodate the expansion. Current plans indicate an eventual 3000-MW plant at the site which would be constructed in four stages. Each of the four units will generate enough electricity for a residential population between 300,000 to 500,000 residents. If all four units should be built, the station would produce power for 1.2 to 2 million residents.

Construction of the first 450-MW Unit began in March 1971 and was more than 75 complete by the time the accompanying EIS was filed in May 1972. Because the planning for the station was initiated during the late 1960's and preceded the passage of NEPA, an environmental impact statement could not have been prepared before the allocation of construction funds. Consequently, the EIS prepared for the first unit was filed to fulfill the legal requirements of NEPA. This first unit is scheduled to be operational in 1974.

The second unit of the Huntington plant has been proposed for construction by UP&L. It would be identical and adjacent to the first 450-MW unit and would require the construction of an additional 345-KV transmission line to be built from the plant to a site about 154 miles south of Salt Lake City. From this location the power

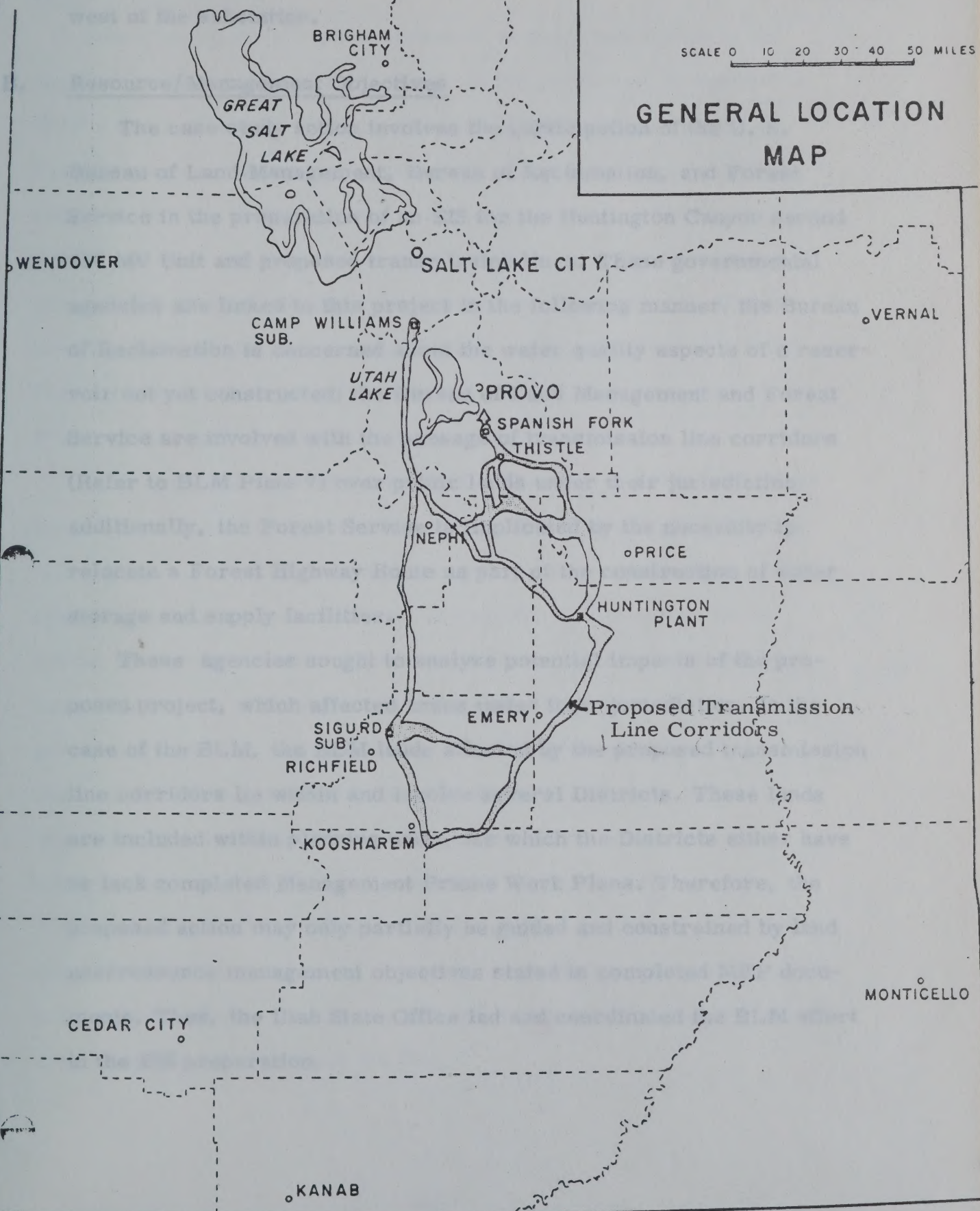
BLM Plate 7

STATE OF

UTAH

SCALE 0 10 20 30 40 50 MILES

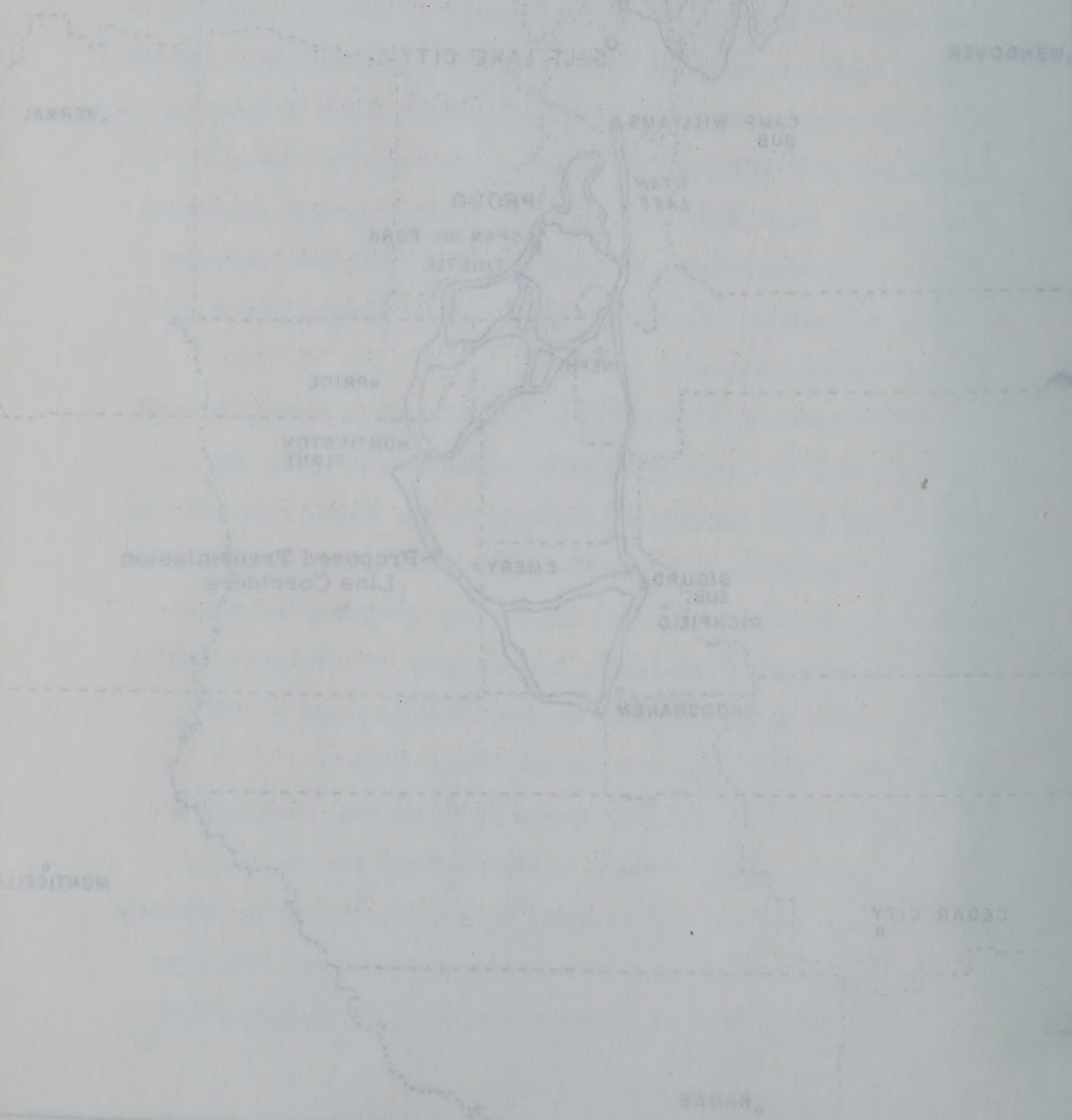
GENERAL LOCATION
MAP



BLM Plate 7
STATE OF
UTAH

SCALE 0 10 20 30 40 50 Miles

GENERAL LOCATION
MAP



would be distributed on the Company's supply lines north, south, and west of the substation.

B. Resource/Management Objectives

The case study action involves the participation of the U. S. Bureau of Land Management, Bureau of Reclamation, and Forest Service in the preparation of an EIS for the Huntington Canyon second 430 MV Unit and proposed transmission lines. These governmental agencies are linked to this project in the following manner: the Bureau of Reclamation is concerned about the water quality aspects of a reservoir not yet constructed; the Bureau of Land Management and Forest Service are involved with the passage of transmission line corridors (Refer to BLM Plate 7) over public lands under their jurisdiction; additionally, the Forest Service is implicated by the necessity to relocate a Forest Highway Route as part of the construction of water storage and supply facilities.

These agencies sought to analyze potential impacts of the proposed project, which affected areas under their jurisdiction. In the case of the BLM, the BLM lands affected by the proposed transmission line corridors lie within and involve several Districts. These lands are included within planning units, for which the Districts either have or lack completed Management Frame Work Plans. Therefore, the proposed action may only partially be guided and constrained by land use/resource management objectives stated in completed MFP documents. Thus, the Utah State Office led and coordinated the BLM effort in the EIS preparation.

would be distributed on the Company's supply lines north, south, and west of the installation.

B. Resource Management Objectives

The case study below involves the jurisdiction of the U. S. Bureau of Land Management, Bureau of Reclamation, and Forest Service in the preparation of an EIS for the Washington Canyon second 450 MW unit and proposed transmission lines. These governmental agencies are linked to this project in the following manner: the Bureau of Reclamation is concerned about the water quality aspects of a transmission line not yet constructed; the Bureau of Land Management and Forest Service are involved with the passage of transmission line corridors (refer to BLM Plate 7) over public lands under their jurisdiction; additionally, the Forest Service is troubled by the necessity to relocate a Forest Highway Home as part of the construction of water storage and supply facilities. These agencies sought to analyze potential impacts of the proposed project, which affected areas under their jurisdiction, in the case of the BLM, the BLM lands affected by the proposed transmission line corridors lie within and involve several Districts. These lands are included within planning units, for which the Districts either have or lack completed Management Frame Work Plans. Therefore, the proposed action may only partially be guided and constrained by land use/resource management objectives stated in completed MFW documents. Thus, the Utah State Office led and coordinated the BLM effort in the EIS preparation.

Issues and Problems

This case study is representative of an individual action in the ongoing planning process of the BLM. In the absence of completed MFP's and a statewide land use plan, the BLM Planning System in Utah accommodated the proposed action; that is, the subject action could not be fully integrated in the planning system operation. It must be pointed out that neither the State Office nor the Districts are at fault, since each is presently involved in the process of implementing and updating the planning system. Also, the State Office and Districts cannot be expected to suspend actions simply because their Planning Systems have not been fully operationalized.

In the preparation of the initial EIS (filed May 5, 1972, with CEQ) for the first unit of the generating station, the Bureau of Reclamation voluntarily assumed the role of lead agency rather than having each agency prepare a separate EIS on its specific part of the action or having the agencies involved issue a jointly prepared statement. Because the Bureau of Reclamation had assumed the lead for the first generating station it was agreed by the participant agencies that the Bureau of Reclamation would continue as the lead for the second unit. Interestingly, the BLM and Forest Service did not vie for the lead agency role, a decision which would later constrain both agencies. While the BLM and USFS desired to investigate the nature of the demand for the additional power plant and address the ensuring secondary and tertiary effects, the Bureau of Reclamation decided that such concerns exceeded the scope of the EIS.

This case study is representative of an individual action in the ongoing planning process of the BLM. In the absence of completed MTP's and a statewide land use plan, the BLM Planning System in Utah accommodated the proposed action; that is, the subject action could not be fully integrated in the planning system operation. It must be pointed out that neither the State Office nor the District are at fault, since each is presently involved in the process of implementing and updating the planning system. Also, the State Office and Districts cannot be expected to suspend actions simply because their Planning Systems have not been fully operational.

In the preparation of the initial EIS (issued May 2, 1972, with CEQ) for the first unit of the generating station, the Bureau of Reclamation voluntarily assumed the role of lead agency rather than having each agency prepare a separate EIS on its specific part of the action or having the agencies involved issue a jointly prepared statement. Because the Bureau of Reclamation had assumed the lead for the first generating station it was agreed by the participating agencies that the Bureau of Reclamation would continue as the lead for the second unit. Interestingly, the BLM and Forest Service did not vie for the lead agency role, a decision which would later constrain both agencies. While the BLM and USFS desired to investigate the nature of the demand for the additional power plant and address the resulting secondary and tertiary effects, the Bureau of Reclamation decided that such concerns exceeded the scope of the EIS.

D. Role of the EAR/EIS

When Utah Power and Light proposed construction of the second unit at Huntington and requested rights-of-way for a 345-KV transmission line across public lands, it became apparent to the Forest Service and the BLM that an analysis of long-term need for transmission line corridors across the Wasatch Plateau should be made. Preliminary to the analysis, the two agencies requested UP&L to prepare a plan which indicated how the company expected to meet projected demand in their service area for the next 20 years. Also, utility companies which might be expected to construct future plants in the Huntington vicinity were contacted to estimate the demands for additional transmission line corridors.

In January 1973, an interdisciplinary team representing both the BLM and Forest Service began an analysis of long-term (next 20 years) need for transmission line corridors across the Wasach Plateau. This combined effort became Volume II of the EIS prepared for the second unit of the Huntington Canyon Generating Station. Volume I covered the second unit only and was prepared by the Bureau of Reclamation. No EAR was prepared by the BLM in this instance since the Bureau of Reclamation had determined the need for an EIS.

The interdisciplinary team representing both the BLM and the Forest Service identified seven corridors across the region that could be used to meet the requirements of the power companies. The statement proceeds to outline the environmental effects resulting from each corridor by ecological and social and economic components. Similarly, the report details the mitigation measures which would minimize the

When Utah Power and Light proposed construction of the second unit at Huntington and requested right-of-way for a 245-KV transmission line across public lands, it became apparent to the Forest Service and the BLM that an analysis of long-term need for transmission line corridors across the Wasatch Plateau should be made. Preliminary to the analysis, the two agencies requested UP&L to prepare a plan which indicated how the company expected to meet projected demand in their service area for the next 20 years. Also, utility companies which might be expected to construct future plants in the Huntington vicinity were contacted to estimate the demands for additional transmission line corridors.

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environmental effects to the environment. The detailed level of information disclosed suggests an exhaustion of the current knowledge and a determined effort to identify the most favorable corridors.

While the statement presents seven alternative sites, there is no discussion of the no-action alternative. Perhaps the no-action alternative is not presented as the generating station is a reality, and transmission lines are a necessary and inevitable outcome. To deny the routing of the transmission lines questions the existence of the plant. This was not the assumption underlying the BLM-USFS statement; rather, the two agencies assumed the construction of the power plants and wished to propose the best possible transmission corridors to accommodate anticipated power requirements.

E. Resultant Action

The draft EIS has been completed and scheduled for public hearings. Simultaneously, as an energy related project, the Department of Interior is expected to review volume II of the draft EIS.

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Responsible Action

The draft EIS has been completed and scheduled for public hearings. Simultaneously, as an energy related project, the Department of Interior is expected to review volume II of the draft EIS.

CASE STUDY IV
FEATHER RIVER MFP AND LAND EXCHANGE
REDDING DISTRICT, CALIFORNIA

A. Case Study Description

This case study involves the employment of the Management Framework Plan (MFP) for the Feather River Planning Unit as a decision making base for several land exchanges. With direction from the MFP and public support of recommendations, the Redding District conducted a land exchange with the Lake California Sub-division in Tehama County involving lands on and near the Sacramento River. Lake California had previously attempted to purchase from the BLM four public land tracts, located and scattered within the sub-division area. The application was rejected because BLM refused to consider anything other than an exchange for front lands along the Sacramento River which has potential wild and scenic status. The Redding District had identified several areas along the Sacramento River that would be suitable for public uses and development. Lake California decided to purchase two of these areas, which they offered to the BLM in exchange for the four public land parcels previously sought. The Redding District accepted the offer from Lake California and received 315 acres of high quality, strategically located river frontage with good public access in exchange for 271 acres, only 50 of which bordered on the river and almost none of which had public access. The two tracts which BLM received were appraised at \$187,000 and the four tracts provided Lake California were valued at \$142,000.

The Redding District is currently negotiating the Young Exchange, in which BLM has been offered 1700 acres of private land that borders

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The Redding District is currently negotiating the Young Exchange, in which BLM has been offered 1700 acres of private land that borders

1.79 miles of the Sacramento River and approximately 3.5 miles of Paynes Creek in exchange for 484 acres of National Resource Land. Mr. Herbert Young desires to own the selected 484 acres in order to sell the commercial timber upon the land in anticipation of paying off the debenture owed on the land he is offering for exchange. The BLM in turn desires to acquire the private lands offered in order to offer the public more public lands for the purposes of recreational use and preservation of values that would be lost if the offered lands were to remain in private ownerships.

B. Resource Management Objectives

In both land exchanges, the Redding District was not interested in reducing land acreage held in public domain. While the selling of public land remains a legitimate responsibility of the BLM, the Redding District elected to emphasize recreation and conservation values. Public land along the Sacramento River is scarce considering the recreational opportunities inherent in the river. Thus, when confronted with prospective purchases of public land, the District stipulates an exchange for only front lands along the river.

The BLM lands involved in the exchange are located within the Feather River Planning Unit for which the URA and MFP have been completed. In the absence of completed program activity plans, the area manager has utilized the Feather River MFP to manage by objectives. He has identified actions including land exchanges from the MFP which he wishes to program and accomplish in the upcoming fiscal years.

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The BLM lands involved in the exchange are located within the Feather River Planning Unit for which the BLM and MRP have been cooperating. In the absence of completed program activity plans, the area manager has outlined the Feather River MRP to manage by objectives. He has identified actions including land exchanges from the MRP which he wishes to program and accomplish in the upcoming fiscal year.

C. Issues and Problems

The Lake California development was already under construction prior to the consummation of the land exchange. The focus of attention centered on an isolated parcel of BLM land bordered by the Sacramento River and Lake California property. Unless the BLM agreed to an exchange or sale, Lake California developers planned to circumscribe this BLM parcel with a levee, which would have denied the BLM any land access to its property. The only viable alternative for the BLM was to conduct a land exchange with Lake California.

D. Role of EAR/EIS

The California Land exchange action occurred prior to the BLM's development of the EAR process. Consequently, the Redding District constructed its own EAR format to comply with Departmental policies and NEPA requirements. Judgement of the Lake California Exchange EAR and its accompanying process must therefore be tempered by these existing circumstances.

Owing largely to the undeveloped BLM formats at the time, the depth of information in the EAR is probably adequate. Today, however, the EAR would be insufficient and would not comply with BLM Manual 1791. The EAR briefly addressed three alternatives, which are: Should BLM even enter into an exchange?; Should BLM proceed with the exchange?; and Should the BLM alter the exchange and not offer all of the selected lands? Perhaps the circumstances of the proposed action obviated the need for a very descriptive and detailed discussion

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of alternatives. Due primarily to the fact that the former BLM lands would have been rendered useless without an exchange, the subject EAR served to justify the land exchange. In the final analysis, the EAR recommended that an EIS was not needed, since the intensity of controversy was low, public interest highly favored the exchange, and adverse impacts could be mitigated to insignificant residual impacts.

E. Resultant Action

The land exchange with Lake California has been consummated. The Young exchange has not yet been approved, although the EAR for the exchange has been written. In both instances, no EIS had been recommended.

As a result of the Lake California exchange, the Redding District generated guidelines for future land exchanges, which the California State Office has accepted and promulgated throughout the State. These guidelines include provisions and specific timing for EAR preparation.

B. Resource/Management Objectives

The harvesting and management of the forest lands are the District's primary objectives, the development of which has been

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CASE STUDY V
TIMBER MANAGEMENT PLAN
EUGENE DISTRICT, OREGON

A. Case Study Description

The purpose of the Eugene case study was to examine that District's Timber Management Plan (for the location of the Eugene District refer to BLM Plate 8). At the onset, it was believed that the Timber Management Plan (TMP) was a formal document labeled "Manual Reference 5110." According to State BLM personnel, Manual Reference 5110 does not exist. In its place, the Eugene District has prepared a set of documents which it believes adequately substitutes for the TMP. These documents are: EAR-Forest Product Harvesting (FY '74), EAR-Forest Development Program (FY '74), and the Annual Timber Plan. This set of documents achieves the land use recommendations of the Management Framework Plan and the Allowable Cut Plan, a document which identifies sustainable timber production. Briefly, the Forest Product Harvesting Plan specifies the methods of timber cutting and their associated constraints. The Forest Development Program involves the processes necessary for reforestation of prior timber cuts. The Annual Timber Plan details the locations, estimated volumes and proposed period during which timber is offered for sale.

B. Resource/Management Objectives

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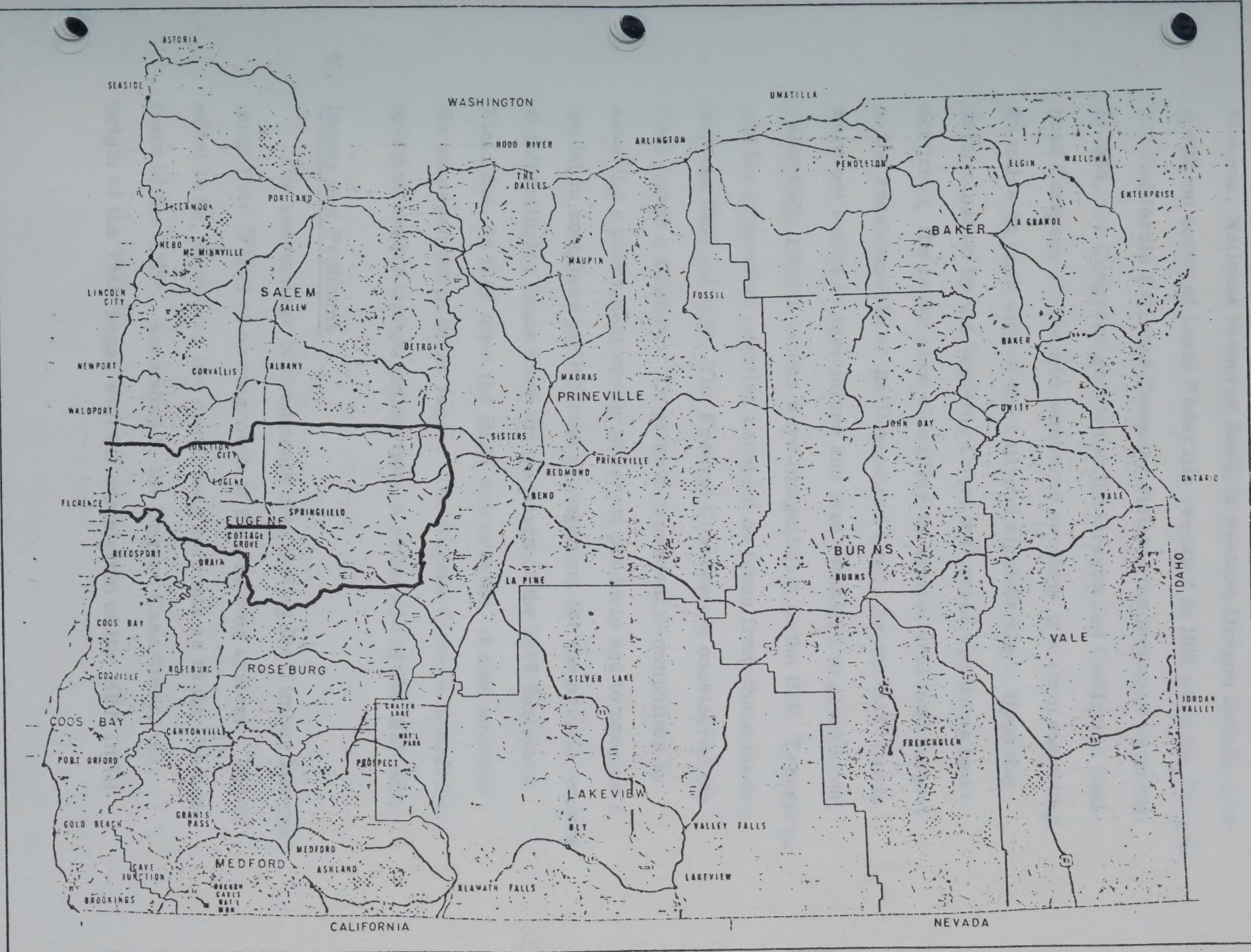
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C. Case Study Description

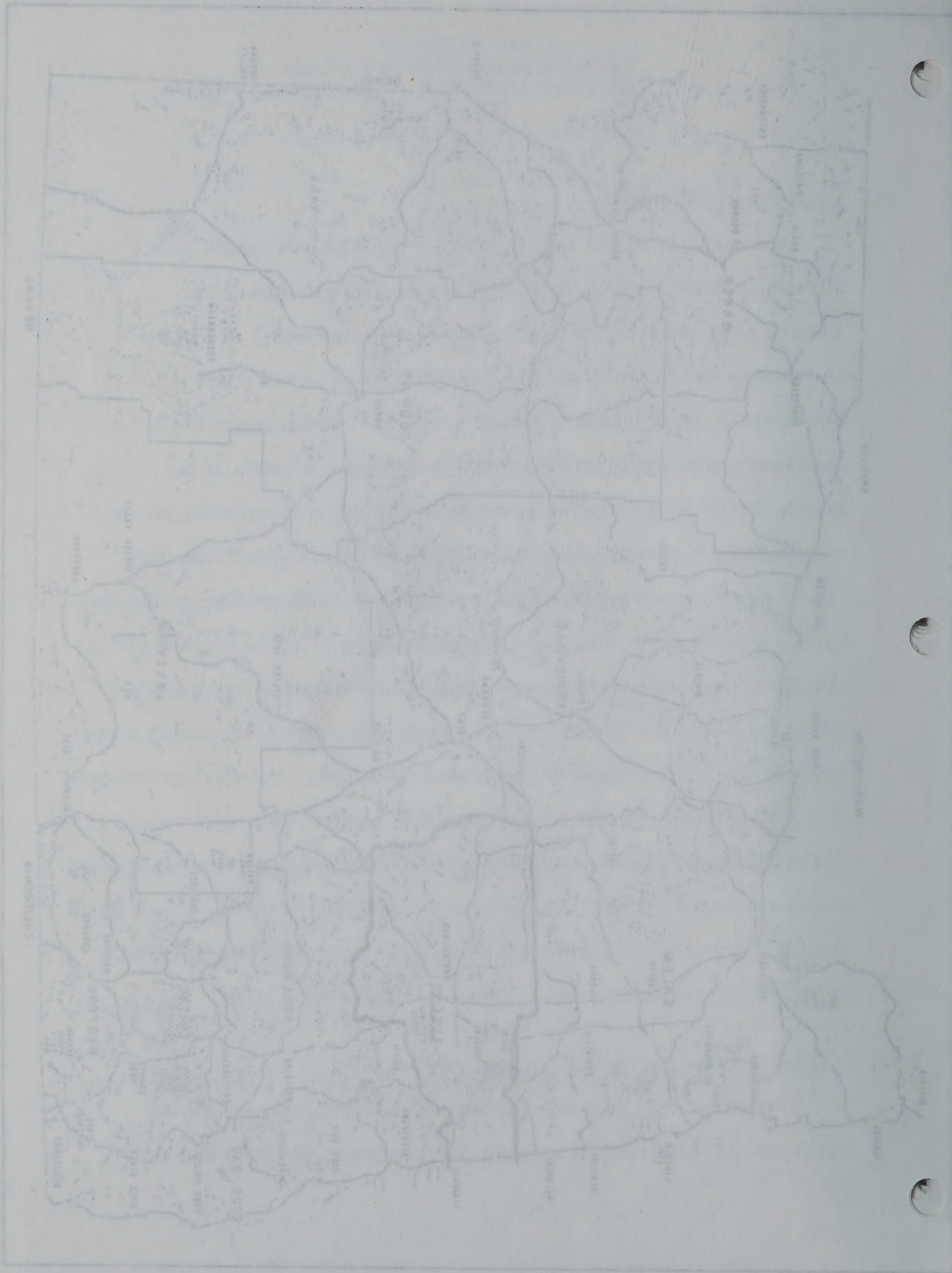
EASTERN DISTRICT, OREGON
JAMES W. WASHINGTON, JR.
CASE STUDY A



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SCALE IN MILES

OREGON

LEGEND
 [] LANDS ADMINISTERED BY THE BUREAU OF LAND MANAGEMENT
 [] LANDS ADMINISTERED BY THE FOREST SERVICE
 --- STATE LINES
 --- HIGHWAYS
 --- R. I. M. DISTRICT BOUNDARIES



historic. National resource lands in western Oregon include over 2 million acres of lands Federally revested in 1916 when the Oregon and California Railroad Company violated the terms of its grant. In 1866, the Congress granted to the Oregon and California Railroad Company all the odd numbered sections in a strip extending 20 miles on each side of the railroad right-of-way. Upon the determination by the Supreme Court that gross violations had occurred, the lands were classified as agricultural land subject to the requirements of the Homestead Law. As the O&C Lands were not suited to agriculture and thus remained in government ownership, timber values were insignificant to the U.S. Treasury, and the respective counties received no taxes from these lands between 1916 and 1926. The Federal Government considered the O&C Lands a liability. To protect dependent communities by assuring a permanent supply of forest products and to provide a model in sustained yield forest management for the private owners of intermingled lands were the purposes of the 1937 Sustained Yield Act. In 1946 when the BLM was created, it was awarded the management of these lands. The Eugene District is heavily oriented toward timber production, a reflection of the 1937 Act.

C. Issues and Problems

The assemblage of documents constituting the Timber Management Plan (TMP) is an outgrowth of the planning system. There seem to be, however, two conflicting accounts as to the development of the TMP. According to the Eugene Case Study, the origin of the TMP began with the completion of the MFP (1971).

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All the MFP's of the planning unit in Western Oregon were aggregated at the State level. As each MFP indicates potential areas of timber harvesting, the State consolidated the recommendations for timber production and given federal policy allocated allowable cuts for each district.

The document, An Allowable Cut Plan for Western Oregon (ACP), March 1970, relates the derivation of the TMP differently. Preparation of the ACP began in February 1966 when the Director of the BLM appointed a staff committee to develop policies and procedures which would produce an allowable cut that responds to multiple use needs, sound forest conservation and the highest level of timber production feasible through intensive management. From the report, submitted to the Director in December 1966, evolved the set of new policies and procedures for allowable cut planning. Implementation would occur pending completion of a comprehensive western Oregon forest reinventory scheduled during the period of 1967-1969. Given the federal charge to temporarily increase timber cutting, the report underwent revision and was finalized in March 1970. The following year witnessed the completion of the MFP's for the Eugene District.

The discrepancy concerns which document -- the MFP or the ACP -- came first. The ACP states that it was completed before the MFP, while the District expresses the opposite view. The MFP is the major document of the BLM planning system. If so, its importance would appear to have been somewhat lessened by the supercedure of the ACP. While this point may

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not be major, it does suggest that the MFP and the planning process was a procedural and mechanical requirement rather than a substantive and critical element of the system.

While an EAR has been prepared for the annual forest product harvesting and the forest development program, no environmental analysis has been performed on the MFP and ACP, the documents from which evolved the Timber Sale allotments for the planning unit. The District Manager sees the MFP as a management tool and analogous to "soft line zoning." The MFP outlines land use for the various resource activities but does not specify the intensity and timing of resource development. The ACP is a policy document. It calculates the annual yield of timber and designates allowable timber production for each planning unit.

D. Role of EAR/EIS

As both MFP and ACP documents are indicative of later activities, they are the critical components of the planning system. The District does not prepare an EAR on the MFP. It maintains that the MFP is a management tool, not an action program. The State has not written an EAR on the Allowable Cut Plan. The District will generate an EAR on the Annual Timber Sale regarding forest harvest and reforestation plans; yet, the State Office has not written an EAR on the plan which proposed the annual timber yields for western Oregon.

E. Resultant Action

The Timber Management Plan remains an informal assemblage of documents. At this writing, there is no indication that the Allowable Cut Plan, the basis of the TMP, will undergo an environmental analysis.

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E. Resource Action

The Timber Management Plan remains an informal assemblage of documents. At this writing, there is no indication that the Allowable Cut Plan, the basis of the TMP, will undergo an environmental analysis.

CASE STUDY VI
URA - ENVIRONMENTAL PROFILE - MFP PROCESS
CARSON CITY DISTRICT, NEVADA

A. Case Study Description

The primary purpose of this case study was to examine a BLM District which had fully implemented the Unit Resource Analysis (URA) - Management Framework Plan (MFP) processes in accordance with directives provided in BLM Instruction Memo 73-269 (Draft Manual Section 1605 for the URA) and BLM Manual Section 1608 (Land Use and Development Planning). Specifically, VTN was to investigate the Environmental Profile section of the URA-MFP process. The BLM lands involved are located within the Pyramid-Long Valley Planning Unit of the Reno Resource Area (Refer to BLM Plate 9) and have been classified for multiple use and retention. The primary land uses include grazing, recreation and wildlife habitats.

B. Resource/Management Objectives

The Carson City District had been selected to conduct the initial implementation and operationalization of the Environmental Profile in the BLM Planning System. The Environmental Profile has been developed by the BLM to fulfil the Bureau's responsibility to analyze, protect and enhance the quality of the environment as an entity.

C. Issues and Problems

The case study revealed that the Environmental Profile was incomplete and not fully implemented. The District had completed the URA (Steps 1 through 4) and MFP Step 1, but had finished only the initial

CASE STUDY VI
URA - ENVIRONMENTAL PROFILE - MFP PROCESS
CARSON CITY DISTRICT, NEVADA

A. Case Study Description

The primary purpose of this case study was to examine a BLM District which has fully implemented the Utah Resource Analysis (URA) - Management Framework Plan (MFP) processes in accordance with directives provided in BLM Instruction Memo 73-282 (Draft Manual Section 1805 for the URA) and BLM Manual Section 1808 (Land Use and Development Planning). Specifically, VTN was to investigate the Environmental Profile section of the URA-MFP process. The BLM lands involved are located within the Pyramid-Lone Valley Planning Unit of the Reno Resource Area (Refer to BLM Plate 2) and have been classified for multiple use and retention. The primary land uses include grazing, recreation and wildlife habitats.

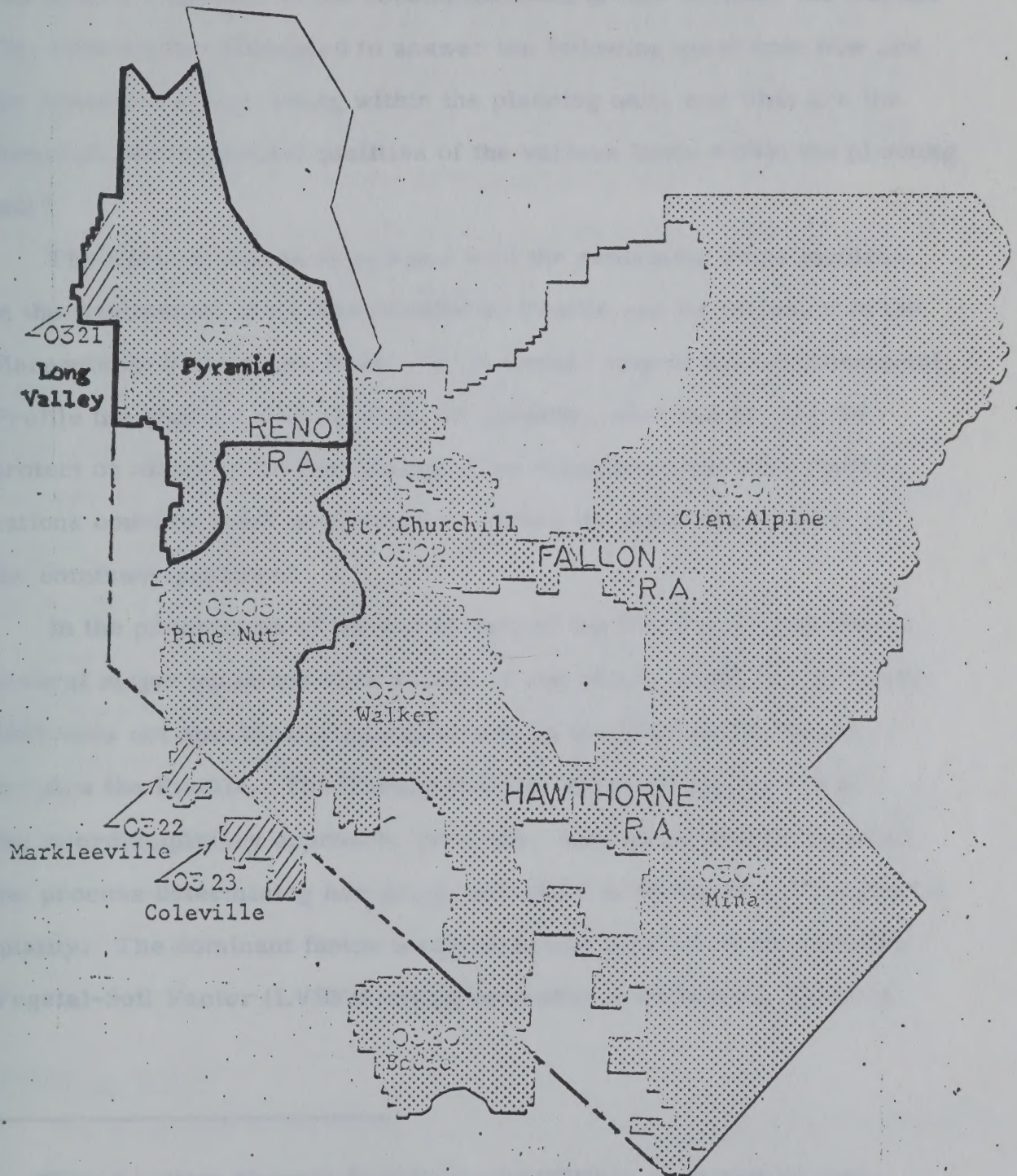
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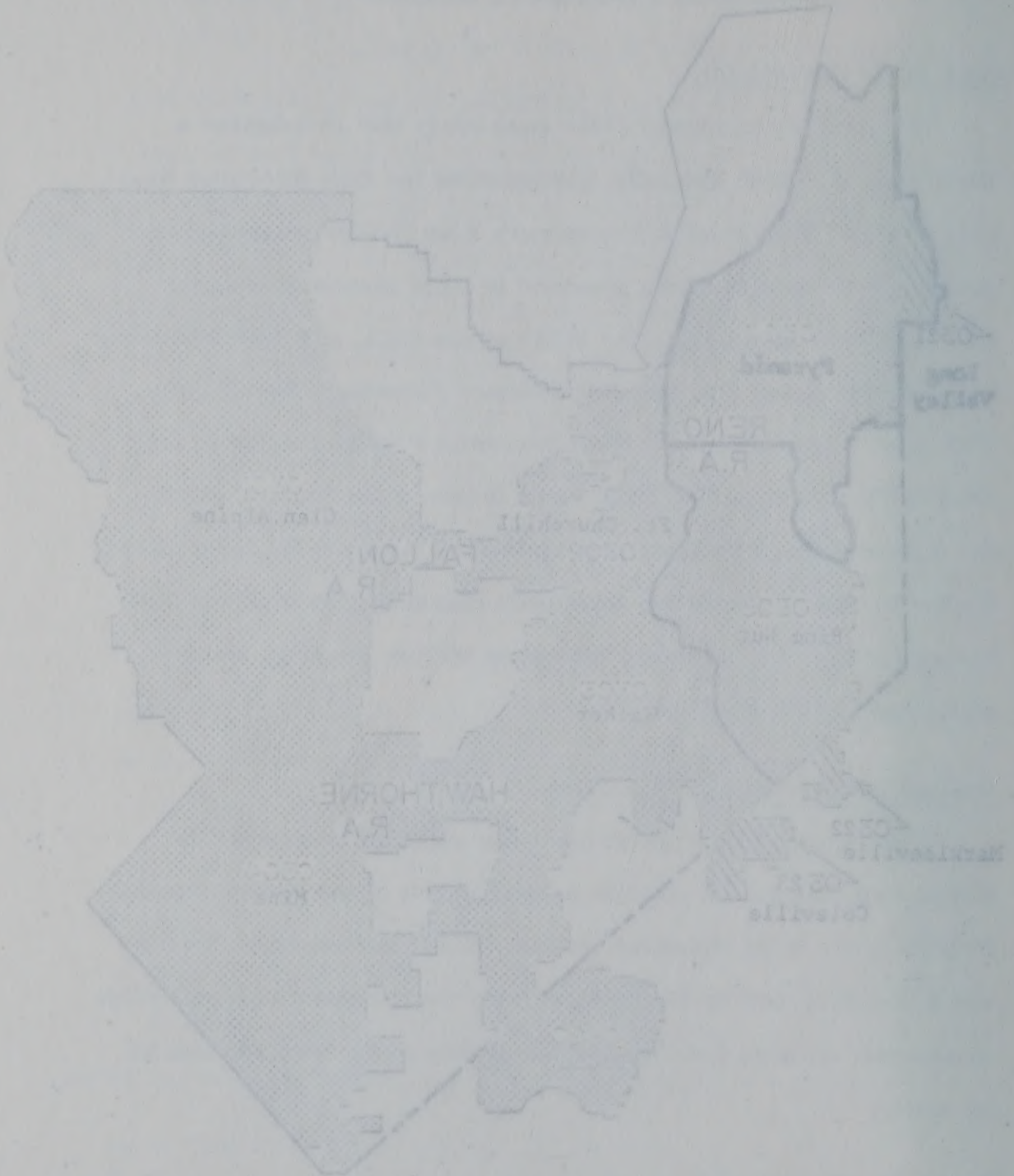
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CARSON CITY DISTRICT

1-20-72



LEGEND

— PLANNING UNIT BOUNDARY

▨ BEST BLOCKED AREA

▧ FRAGMENTED AREA

CARSON CITY DISTRICT

section of the profile titled "Present Situation for Ecological Factors and Human Values." In the accomplishment of this section, the Carson City District has attempted to answer the following questions: how are the ecosystems functioning within the planning unit, and what are the dominant environmental qualities of the various lands within the planning unit?

The District will soon proceed with the remaining steps involved in the finalization of the Environmental Profile and its inclusion in the Management Framework Plan. In the second step of the Environmental Profile the District will address the question: what can be done to protect or enhance the functioning of the ecosystem and what modifications could be made to reinforce, protect or delay degradation of the dominant qualities?

In the preparation of the initial step of the Environmental Profile, several major questions have arisen. First of all, BLM, Draft Manual 1605 does not specifically designate who in the District Office will prepare the Profile. The Carson District suggests application of the interdisciplinary approach. Secondly, district personnel question the process determining how areas are rated in terms of environmental quality. The dominant factor involved in this process is the Limited Vegetal-Soil Factor (LVSF)* rating accorded to each area. District

*The Limiting Vegetal-Soil Factor (LVSF) is a statistical combination of three factors generated in the Watershed Inventory. The ADP printout "Determination of Rating Points by Individual Watershed" lists the factor for each watershed transect representative area. The factor was developed by weighting values for vegetal cover density, effective root depth and soil surface factor to derive three rating levels of environmental concern, development and management potential.

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personnel relate that the overriding emphasis of this factor tends to bias and thus distort the environmental quality classification of an area. Also, the process of overlays may be misleading. In the preparation of the Environmental Profile Overlay, overlays from the Physical Profile of URA-Step 2 and resource inventories of URA-Step 3 are in effect treated and used as coequal parameters, that is, the overlay technique treats all these overlays roughly equal in relative weight. The District recognizes that one overlay may in fact be more important than others in the makeup of the ecological setting, situation and interrelationships. However, the overlay technique fails to accommodate such a consideration. Third, VTN personnel question the usefulness and need for Landscape Values. Man's perception of sight, smell, taste, sound and touch is a highly subjective matter, yet the Bureau has attempted to document the Landscape Values in a narrative, which represents the values and perceptions of only the BLM District person or persons. This procedure fails to address and consider the human values of other persons.

D. Role of EAR/EIS

The subject matter of this case study did not involve preparation of an EAR or EIS. Nevertheless, the data in the Environmental Profile would provide direct input into the EAR or EIS.

E. Resultant Action

The first step of the Environmental Profile has been completed and, at present the record step of the profile is being prepared.

Appendix 2 and 3 provide examples of the initial step concerning present situation ecological factors and landscape values, respectively.

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E. Resistant Action

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2. PART 2: FINDINGS RELATED TO THE PLANNING SYSTEM

Findings relating to staffing, management, the planning process, and the EAR/EIS process have been gathered during examination of the case study subject. These observations have been included because they are appropriate and applicable to the purposes of this report.

a. Billings District, Montana

(1) Staffing

- a. District expresses a need for staff personnel with expertise in economics, political science, sociology and watershed management.
- b. Inflation has caused the diversion of program activity funding to staff salaries.
- c. EAR/EIS demands have been added to BLM workload without increases in staff size.
- d. District and State offices express a need for additional qualified staff to write EIS documents. The present staff requires training and instruction in the preparation of the EIS and also in the implementation of the BLM planning process.
- e. The position of Environmental Coordinator at the State Office level helps District personnel understand the mechanics of the EAR/EIS process.

(2) Management

- a. District personnel comment that BLM policies, manuals and other directives tell them what to do in the planning process, but very little, if any, concerning how to do certain operational tasks.

(3) Planning Process

- a. District is unclear concerning the need for the District Management Profile when the District is primarily concerned with resource management.
- b. The Initial Analysis (in BLM Manual 1604) is not applicable, since the four types of planning units have been abandoned.
- c. District personnel find the URA to be a useful document and procedure since it promotes creative thoughts and ideas and prevents the writer from compromising his recommendations early in the planning process.

2. PART 2: FINDINGS RELATED TO THE PLANNING SYSTEM

Findings relating to staffing, management, the planning process, and the EAR/EIS process have been gathered during examination of the case study subject. These operations have been included because they are appropriate and applicable to the purposes of this report.

a. Billings District, Montana

(1) Staffing

- District expresses a need for staff personnel with expertise in economics, political science, sociology and wilderness management.
- Inflation has caused the diversion of program activity funding to staff salaries.
- EAR/EIS demands have been added to BLM workload without increases in staff size.
- District and State offices express a need for additional qualified staff to write EIS documents. The current staff requires training and instruction in the preparation of the EIS and also in the implementation of the BLM planning process.
- The position of Environmental Coordinator at the State Office level helps District personnel understand the mechanics of the EAR/EIS process.

(2) Management

- District personnel comment that BLM policies, manuals and other directives tell them what to do in the planning process, but very little, if any, concerning how to do certain operational tasks.

(3) Planning Process

- District is unclear concerning the need for the District Management Profile when the District is primarily concerned with resource management.
- The Initial Analysis (in BLM Manual 1004) is not applicable, since the four types of planning units have been abandoned.
- District personnel find the UMA to be a useful document and procedure since it promotes creative thoughts and ideas and prevents the writer from compartmentalizing his recommendations early in the planning process.

- d. Billings District has not incorporated the Environmental Profile in the URA process.
- e. BLM manuals do not provide district managers with any guidance concerning resolution of conflicts in MFP-Step 2. District manager has improvised his own procedure by introducing problem identification and issue analysis techniques and using public input as a check and balance against his staff's findings and recommendations.
- f. Public input - The District seeks public input in URA-Step 3 for data and between MFP-Steps 1 and 2 for comments and as a check and balance against staff findings and recommendations. District has experienced great difficulty attaining public interest and input on actions with little or no controversy. District distributes brochures to the public concerning Land Use planning proposals and issues considered in preparation of an MFP.
- g. The District asserts that the MFP is not an action document because it lacks detail and specificity. Actions are contained in program activity plans, which are derived and prepared from MFP's for each planning unit.
- h. The transition from MFP/Program Activity Plans in Land Use and Development Planning component to the Program Planning component is not clearly defined in BLM manuals.

(4) EAR/EIS Process

- a. Planning process was initiated and generally outlined prior to NEPA; EAR is seen as evolving from planning system, whereas, the EIS has been imposed on planning system by NEPA.
- b. EAR closely parallels EIS guidelines in terms of contents except there is no formal interagency review. Also, public input is not mandatory.
- c. EAR is not circulated for interagency review; usually the extent of review depends on the nature of the proposed action.
- d. EAR is prepared for each action.
- e. The State and District Offices have not classified actions by type which require preparation of EIS.
- f. To date, the District has not written any EIS documents.
- g. District asserts that the final decision to prepare an EIS should be delegated to the State Office, and that the majority of these determinations should not have to go to the Washington Office - Department of Interior route.

Billings District has not incorporated the Environmental
Review in the URA process.

BLM manuals do not provide district managers with any
guidance concerning resolution of conflicts in MFP-Step 2.
District manager has improvised his own procedure by
involving problem identification and issue analysis tech-
niques and using public input as a check and balance against
his staff's findings and recommendations.

Public input - The District seeks public input in URA-Step
2 for data and between MFP-Steps 1 and 2 for comments
and as a check and balance against staff findings and
recommendations. District has experienced great difficulty
obtaining public input and input on actions with little
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the public concerning land use planning proposals and
issues considered in preparation of an MFP.

The District asserts that the MFP is not an action document
because it lacks detail and specificity. Actions are contained
in program activity plans, which are devised and prepared
from MFP's for each planning unit.

The transition from MFP/Program Activity Plans to Land
Use and Development Planning component to the Program
Planning component is not clearly defined in BLM manuals.

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Planning process was initiated and generally outlined prior
to NEPA. EAR is seen as evolving from planning system.
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District asserts that the final decision to prepare an EIS
should be delegated to the State Office, and that the majority
of these determinations should not have to go to the Washington
Office - Department of Interior route.

- h. Introduction of NEPA hastened the multi-disciplinary approach in the BLM planning system.

Bureau may have shied away from the larger projects due to lack of data from planning system and demands of EAR.

b. Rawlins District, Wyoming

(1) Staffing

- a. District does not need an economist, sociologist or political scientist to prepare the District Economic Supplement and District Management Profile. The present staff can handle these requirements.
- b. District needs an archaeologist, soil scientist for watershed management and a realty specialist.
- c. EAR/EIS demand has been added to BLM workload without an increase in staff size.
- d. Staff size is inadequate to generate EAR's for all District actions.
- e. District personnel need to be shown "how" to prepare EAR and EIS documents in addition to other phases of BLM planning process.

(2) Management

- a. The need for an EIS entails diversion of program activity monies to cover cost of EIS preparation.

(3) Planning Process

- a. District personnel comment that the planning process tells them what to do but very little or nothing concerning how.
- b. Planning system appears to be continually developing with no end state predicted or imagined.
- c. The District Economic Supplement is helpful at the State level, but meaningless at the District level. The State Economic Profile serves as primary guidance.
- d. The District is unclear concerning how the District Management Profile fits into the planning process when the District's primary task is resource management.
- e. The Initial Analysis (in BLM Manual 1604) is not applicable since the four types of planning units have been abandoned.

h. Introduction of NEPA hastened the multi-disciplinary approach in the BLM planning system.

Bureau may have shied away from the larger projects due to lack of data from planning system and demands of EAR.

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d. Staff size is inadequate to generate EAR's for all District actions.

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(2) Management

a. The need for an EIS entails division of program activity monies to cover cost of EIS preparation.

(3) Planning Process

a. District personnel comment that the planning process tells them what to do but very little or nothing concerning how.

b. Planning system appears to be continually developing with no end state predicted or intended.

c. The District Economic Supplement is helpful at the State level, but meaningless at the District level. The State Economic Profile serves as primary guidance.

d. The District is unclear concerning how the District Management Profile fits into the planning process when the District's primary task is resource management.

e. The Initial Analysis (in BLM Manual 1000) is not applicable since the four types of planning units have been abandoned.

- f. The District expressed the following strengths of the Planning System:
 - (1) It has pulled together data at the District and State levels for useful and meaningful purposes.
 - (2) It provides all resources activities with access and input into the decision-making process (MFP-Step 2); it broke the stranglehold and monopoly of the grazing allotment activity.
 - (3) It supplies justification for proceeding with District actions.
- g. The District asserts that the MFP is not an action document because it lacks details and specificity. Actions are contained in program activity plans, which are derived and prepared from the MFP for each planning unit.
- h. Planning system does not generate sufficient alternatives during the MFP level.
- i. Public input:
 - (1) District seeks public input in MFP Step 2 for comments on the multi-use resource plan.
 - (2) District has experienced great difficulty arousing public interest on non-controversial actions.
 - (3) District has prepared brochures for public review concerning land use recommendations in preparation of the MFP
 - (4) NEPA has opened up the BLM Planning System to the public.
 - (5) Public scrutiny has improved the quality of BLM projects and actions.
 - (6) NEPA, in increasing public participation, extended the length of time in the planning process, thus deferring scheduled projects.
- j. The transition from MFP/Program Activity Plans in the Land Use and Development Planning component to Program Planning is not clearly defined in BLM manuals. District is aware that the AWP is the vehicle by which proposed actions are eventually financed. Wyoming State Office is currently working on MAP-MYP, which will tie MFP's or program activity plans to Program Planning to the Program and Financial Management System of BLM.

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 - (3) It supplies justification for proceeding with District actions.
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(4) EAR/EIS Process

- a. The EAR resulted totally from NEPA, and the EIS requirement was imposed on the BLM planning process.
- b. State Office asserts that CEQ Guidelines do not provide adequate information concerning the level and depth of analysis for an EIS.
- c. It is unclear whether or not public hearings are mandatory for an EIS. The Wyoming State Office believes public hearings are discretionary depending on the nature of the action involved, whereas, the Bureau asserts that such hearings are mandatory.
- d. Public hearings are not mandatory in the EAR process.
- e. The EAR is written for every action, regardless if it is a minor or major action.
- f. During preparation of the EAR, the test for significance is determined after mitigative measures have been considered and applied to adverse environmental impacts.
- g. To date, the District has not written any EIS documents; however, the Washington Office recently promulgated that an EIS is required for the Medicine Bow Coal Company Road and Powerline Right-of-Way.
- h. District expressed that the final decision to prepare an EIS should rest with the State Director. The District is close enough to the State Director such that both levels would have a clear and full understanding of the issues and problems at hand in order to make intelligent decisions. The process of forwarding EIS recommendations to the Washington Office should be discontinued because it costs time and money and requires reeducating Washington Office personnel on the specific action.
- i. Alternatives which are generated in the EAR or EIS process serve to justify the proposed action rather than serving as viable alternatives which may be considered for implementation.

c. Utah State Office, Utah

(1) Staffing

- a. District staffs are weak in sociology and economics and lack sufficient ability to determine the secondary effects.
- b. Districts need personnel capable of coordinating and preparing an EIS.
- c. Districts have experienced difficulty implementing the interdisciplinary approach.

(2) EAR/EIS Process

- a. The EAR resulted totally from NEPA, and the EIS requirement was imposed on the EIM planning process.
- b. State Office asserts that CEQ Guidelines do not provide adequate information concerning the level and depth of analysis for an EIS.
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(2) Management

- a. The review and public participation features of NEPA have slowed the decision-making process in the BLM.
- b. BLM manuals are becoming too specific. Comments, which were received, express a preference for manuals which provide a framework rather than a detailed approach.
- c. State Office asserts that personnel at the District level do not fully understand the system and organization of the BLM.
- d. State Office believes that public exposure of BLM activities resulting from NEPA requirements has sensitized the BLM to environmental concerns.

(3) Planning Process

- a. BLM manuals tell what to do, but very little how to do. Utah State Office has addressed the following problem areas with supplemental guidance to BLM 1608:
 - (1) Program activity recommendations (MFP-Step 1) seem to lack direction in terms of basic objectives for management and for development of individual resources to meet specific needs.
 - (2) The completed MFP narrative contains a volume of recommendations, rationale and analysis but with very little continuity and excessive redundancy. Thus, it is difficult to track recommendations through the system and to understand why they were accepted, modified or discarded.
 - (3) Once an MFP has been completed, there is often a void as to what action should be taken to move from MFP to the activity planning process.
- b. The Utah State Office has established and prescribed a system for coordination, review and approval of the URA and MFP. The objective of this supplement to BLM 1608 is to schedule appropriate inputs from district staff to the planning system documents (URA and MFP) and coordinate appropriate State staff involvement to assume technical adequacy and to provide formal approval of completed URA and MFP documents by the State Director.

When preparing URA-Steps 3 & 4 and MFP-Step 1, each District resource specialist consults with the State staff resource specialist. The "tunnel vision" approach is still maintained; however, the State staff specialist introduces State and regional considerations for input to data generated at the District level.

(3) Management

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- c. The Utah State Office asserts that the planning system is "forcing" resource specialists at the District level to become planners, a role in which they find themselves miscast. A resource specialist must now document his work (URA, MFP, AMP, etc.) and plan for his resource area of responsibility. When this resource specialist advances to the role of an area manager, he finds that he lacks management and planning capabilities, some of which are attributed to the planning system. Another problem is that the Bureau is currently hiring resource specialists; the State Office advocates bringing in planners with diverse backgrounds.
- d. Utah State Office advocates EAR work on the MFP, a document which is becoming very detailed. Utah MFP's include an "action" section, which focuses the MFP toward coordinated activity plans and, in the absence of activity planning procedures for all resources, provides an interim step for implementation of the MFP.
- e. Public participation has increased the sensitivity of BLM State and District staffs.
- f. URA, when completed, should be a sufficient information base for BLM activities.

(4) EAR/EIS Process

- a. BLM has only a few, if any, analytical tools for weighing and balancing public input, environmental impacts, and socioeconomic factors.
- b. Field offices lack technical means to identify and determine both beneficial and adverse effects of an action.
- c. BLM has not defined "major" action. The EAR determines what is or is not "major."
- d. Field offices have the capacity to address primary effects but are weak at the identification of secondary effects.
- e. Determination of adverse effects is a common sense rather than a technical decision.
- f. Districts consider the "no-action" alternative in the EAR.
- g. BLM review of outside agencies' environmental impact statements is becoming increasingly difficult as the document becomes increasingly thick.
- h. The method of public participation the District selects (i.e., telephone, letter, formal hearings) is dependent on the type of action.

- c. The Utah State Office asserts that the planning system is "forcing" resource specialists at the District level to become planners, a role in which they find themselves mistreated. A resource specialist must now document his work (URA, MRP, AMP, etc.) and plan for his resource area of responsibility. When this resource specialist advances to the role of area manager, he finds that he lacks management and planning capabilities, some of which are attributed to the planning system. Another problem is that the Bureau is currently hiring resource specialists; the State Office advocates bringing in planners with diverse backgrounds.
- d. Utah State Office advocates EAR work on the MRP, a document which is becoming very detailed. Utah MRP's include an "action" section, which focuses the MRP toward coordinated activity plans and, in the absence of activity planning procedures for all resources, provides an interim step for implementation of the MRP.
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d. Redding District, California

(1) Staffing

- a. Personnel remains resource oriented and relatively unchanged by the introduction of BLM's planning process and NEPA.
- b. Need staff member with sufficient ecological background to coordinate preparation of EAR/EIS.
- c. Interdiscipline approach is difficult to maintain due to a manpower coordination problem.
- d. District needs to increase staff size to handle increases in workloads and NEPA-related demands.
- e. Since 1970, the Redding District has been staffing "up," not in number but in types of resource specialists.
- f. In the absence of available district staff support or expertise, the Redding District has requested assistance from the State Office and the Denver Service Center.

(2) Management

- a. Although Bureau manuals tend toward standardization, there is some concern that manuals are too specific.
- b. Not enough instruction on "how to do" or accomplish responsibilities outlined in the Bureau manuals.
- c. Area Manager is utilizing MFP to manage by objectives. Additionally, the MFP provides guidance for programming and budgeting future actions in the planning unit.

(3) Planning Process

- a. Area Manager identified the following potential dangers of the present planning system:
 - (1) Too systematic -- danger of people becoming complacent, i.e., the planning system will do the job.
 - (2) Too much reliance on URA-MFP documents -- danger of ignoring other sources of information and techniques.
 - (3) The environmental profile should not serve as the only base for the EAR -- danger of ignoring other sources.
 - (4) Danger of fitting the planning components to one end -- might ignore alternative means to same end.

(1) Staffing

- a. Personnel remains resource oriented and relatively unmanaged by the introduction of BLM's planning process and NEPA.
- b. Need staff member with sufficient ecological background to coordinate preparation of EAR/EIS.
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 - (4) Danger of fitting the planning components to one end -- might ignore alternative means to same end.

(5) "Tunnel vision" approach and innovation -- Area Manager has commented that resource specialists have not exercised very profound and creative thinking, and he has had to "kick" back URA-Step 4 resource opportunities to the resource specialists for more thought and input.

- b. Since the staff is primarily resource oriented, there is some question concerning the sensitivity of the staff to recognize environmental interrelationships.
- c. NEPA added to the acceptance of the BLM planning system at the District Office level.
- d. The District Economic Supplement lacks specific and helpful detail, and the district questions its usefulness in the planning process.
- e. MFP's are presently being prepared independent of each other; district recognizes that the content of these documents may be interdependent, which will necessitate overall coordination of MFP's at the District and possibly at the State levels.
- f. Public Input and Participation

(1) Public input is sought in URA-Step 3 for more data.

(2) Public involvement occurs in MFP-Step 2 in conflict resolution. Area Manager identifies the major conflicts to be discussed in public meetings.

(3) Area Manager expresses difficulty in weighing and balancing public input and response. What do you look at?
Local Interests vs. State Interests?
Local Interests vs. National Interests?

(4) EAR/EIS Process

- a. Information system (URA, MFP) provides sufficient data to develop MFP but not to prepare the EAR. Thus, the EAR generates the need to uncover more data. Why develop an information system acknowledged to be incomplete?
- b. The kind of data the information system is collecting has not substantially changed due to NEPA. There is now more emphasis on the small environmental factors.
- c. State Office has taken no steps to define a major action and claims the word "major" is too judgmental.

BLM has developed three levels of EAR -low, medium and high. What is the difference between each level and what distinguishes a high level EAR and an EIS remain unanswered.

(5) "Tunnel vision" approach and innovation -- Area Manager has commented that resource specialists have not exercised very profound and creative thinking, and he has had to "kick" back URA-Step 4 resource opportunities to the resource specialists for more thought and input.

b. Since the staff is primarily resource oriented, there is some question concerning the sensitivity of the staff to recognize environmental interrelationships.

c. NEPA added to the acceptance of the EIM planning system at the District Office level.

d. The District Economic Supplement lacks specific and helpful detail, and the district questions its usefulness in the planning process.

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BIM has developed three levels of EAR -- low, medium and high. What is the difference between each level and what distinguishes a high level EAR and an EIS remains unanswered.

- d. No definition for "significance" exists. Determination of significance is dependent upon the information available. Staff should make a determined effort to look beyond immediate effects and consider the secondary spinoffs.
- e. Regarding the level of detail of the EAR/EIS, the greater the ability to predict impacts, the greater the level of detail.
- f. Determination of adverse effects is a judgemental decision according to the State Office. It is difficult to technically determine adverse effects due to state-of-the-art limitations.
- g. "No-action" alternative is always considered. The State Office would like to see the Districts spend more time on analysis of the proposed action than the development of alternatives.
- h. There is no direct public input into EAR.
- i. Neither the State Office or the District Office has identified the types and classes of actions likely to require an EIS and those actions likely not to require a statement. District personnel expressed that it is difficult to give an overall classification that an action will or will not have significant impacts which demand EIS preparation. Instead, BLM actions need a case by case examination.

e. Eugene District, Oregon

(1) Staffing

- a. District hires primarily resource specialists. Would like to hire an environmental coordinator to oversee EAR's and be advisory to the District Manager.
- b. District has negotiated research contracts with the University of Washington and Oregon State University.
- c. Interdisciplinary team consists of the individual resource specialists.

(2) Management

- a. District believes Manual Section 1791 (EAR) affords sufficient flexibility in terms of preparation.

(3) Planning Process

- a. URA should be the basis for input into the EAR.
- b. Data, which are collected, are not systematically stored and updated.
- c. Public participation tends to be passive. The District asserts that it is difficult to generate interest in the MFP

- d. No definition for "significance" exists. Determination of significance is dependent upon the information available. Staff should make a determined effort to look beyond immediate effects and consider the secondary impacts.
- e. Regarding the level of detail of the EIR/EIS, the greater the ability to predict impacts, the greater the level of detail.
- f. Determination of adverse effects is a judgemental decision according to the State Office. It is difficult to technically determine adverse effects due to state-of-the-art limitations.
- g. "No-action" alternative is always considered. The State Office would like to see the Districts spend more time on analysis of the proposed action than the development of alternatives.
- h. There is no direct public input into EIR.
- i. Neither the State Office or the District Office has identified the types and classes of actions likely to require an EIS and those actions likely not to require a statement. District personnel expressed that it is difficult to give an overall classification that an action will or will not have significant impacts which demand EIS preparation. Instead, EIS actions need a case by case examination.

e. Eugene District, Oregon

(1) Staffing

- a. District hires primarily resource specialists. Would like to hire an environmental coordinator to oversee EIR's and be advisory to the District Manager.
- b. District has negotiated research contracts with the University of Washington and Oregon State University.
- c. Interdisciplinary team consists of the individual resource specialists.

(2) Management

- a. District believes Manual Section 1701 (EIR) affords sufficient flexibility in terms of preparation.

(3) Planning Process

- a. URA should be the basis for input into the EIR.
- b. Data, which are collected, are not systematically stored and updated.
- c. Public participation tends to be passive. The District asserts that it is difficult to generate interest in the MFP.

since it is not an action. To better understand public attitudes, BLM members are involved in outside community groups.

- d. Public has little knowledge of what the BLM does, although the BLM is willing and does work with community groups. To gather public input the Eugene District has a citizens advisory board called the District Advisory Board which is representative of the District.

(4) EAR/EIS Process

- a. An EAR is prepared for all actions.
- b. Regarding the matter of significant impacts, the prime concern is the intensity of public controversy.
- c. The decision that an action may have significant impacts is a "gut reation".
- d. During the analysis of adverse effects, the District considers favorable effects as well.
- e. Alternatives which are generated serve to justify the original action.
- f. Believe that economic analysis should not be included in the EAR.
- g. EAR reviewed by State agencies. State clearinghouse is aware of all actions.
- h. An EAR/EIS should be prepared for the Allowable Cut Plan.
- i. BLM EAR system depends on candidness. There should be a different man to write the EAR than prepared the Timber Management Plan.

f. Carson City District, Nevada

(1) Staffing

- a. District enjoys the variety of expertise among its present staff members, which adequately lends to the interdisciplinary approach.
- b. District asserts that it does not need an economist or sociologist. Outside consultation is available in those areas.
- c. When the District lacks the expertise, it has consulted other governmental agencies, educational institutions, and private groups for information concerning archaeology, history sites, cultural values and recreational values.

since it is not an action. To better understand public attitudes, BLM members are involved in outside community groups.

b. Public has little knowledge of what the BLM does, although the BLM is willing and does work with community groups. To gather public input the Eugene District has a citizens advisory board called the District Advisory Board which is representative of the District.

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- District asserts that it does not need an economist or sociologist. Outside consultation is available in those areas.
- When the District lacks the expertise, it has consulted other governmental agencies, educational institutions, and private groups for information concerning archeology, history sites, cultural values and recreational values.

- d. State Office personnel recognize a future need for more economists, soil scientists and landscape architects in the operations of the planning system.
- e. The staff positions created by NEPA include the State Environmental Coordinator, the District Environmental Coordinator (to be hired soon), and the Surface Protection Specialist.
- f. The District workload has been increased by EAR preparation without concurrent increases in staff size.

(2) Management

- a. District and State personnel relate that BLM Manuals provide extensive procedural details, but afford minimal elaboration pertaining to how to accomplish certain tasks required in the planning system, for example, conflict resolution in MFP Step 2.
- b. District personnel expressed that the Planning System is forever changing and has been modified much too often, which has negatively affected the District's management and on-going work. There is a need for "manual stability" so that work can proceed with purpose or meaning.
- c. BLM Manuals are becoming too detailed and specific that the BLM runs the risk of standardizing everything. District recognizes the dangers in becoming so wrapped up in procedural details that major objectives are forgotten and often ignored.

(3) Planning Process

- a. District has experienced some difficulty obtaining public response, especially in planning matters which involve little, if any, controversy.
- b. Public input is sought in URA Step 3 for information and data and in MFP Step 2. BLM Manuals do not specifically state where public input should be included and do not provide guidance pertaining to weighing and balancing of public responses with BLM findings and recommendations.
- c. BLM Manuals do not provide available methodologies for Area Managers and District Managers to resolve conflicts in MFP Step 2.
- d. It remains unclear who in the District Office has the responsibility to prepare the Environmental Profile. District recommends the interdisciplinary approach rather than preparation by one or two individuals.

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(2) Management

a. District and State personnel realize that BLM Manuals provide extensive procedural details, but afford minimal elaboration pertaining to how to accomplish certain tasks required in the planning system, for example, conflict resolution in MFP Step 3.

b. District personnel expressed that the Planning System is forever changing and has been modified much too often, which has negatively affected the District's management and on-going work. There is a need for "manual stability" so that work can proceed with purpose or meaning.

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c. BLM Manuals do not provide available methodologies for Area Managers and District Managers to resolve conflicts in MFP Step 3.

d. It remains unclear who in the District Office has the responsibility to prepare the Environmental Profile. District recommends the interdisciplinary approach rather than preparation by one or two individuals.

- e. The District questions the use of the overlay technique and the overriding emphasis of the Limiting Vegetal-Soil Factor (LVSF) ratings in the preparation of Environmental Profile-Step 3.
- f. Since the District has not completed the Environmental Profile for the Pyramid-Long Valley Planning Units, the operational value of the profile remains largely unknown and speculative.
- g. NEPA has positively influenced the BLM System since it has greatly improved the decision-making processes involved in planning.
- h. In URA Step 4, resource specialists have not taken full advantage of the tunnel vision approach. It has been necessary for Area Managers and the District Manager to return initial analyses of the resource specialists for more development and thought.

(4) EAR/EIS Process

- a. Public input for an EAR may vary according to the type of action and level of controversy involved. An EIS requires public meetings and participation.
- b. The development of the EAR has brought about the use of the interdisciplinary approach and facilitated better decision-making.
- c. District and State Offices have not prepared a listing of actions which require an EIS. Each action must be considered individually.
- d. The BLM provides no guidance for weighing and balancing impacts on the environment.
- e. District does not conduct cost benefit analysis because it either lacks the expertise or the necessary information.
- f. The determination of adverse impacts is dependent on (1) guidance set forth in the MFP, (2) outside sources and opinions, (3) common knowledge and (4) BLM staff expertise.
- g. State Office personnel believe that the final decision, whether or not an EIS is required, should rest with the State Director.
- h. Review of EIS's prepared by other Federal agencies has placed an added burden on State and District Offices. Since this review occurs usually without advanced notice, it has often interrupted the work of the BLM field offices.
- i. State Office claims that the 10 day notice, served prior to publication in the Federal Register of the availability of the Draft EIS for public review, does not allow sufficient time for the field office to prepare for and accommodate public inquiries.

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b. NEPA has positively influenced the BLM system since it has greatly improved the decision-making processes involved in planning.

c. Since the District has not completed the Environmental Profile for the Pyramid-Lone Valley Planning Unit, the operational value of the profile remains largely unknown and speculative.

d. The District questions the use of the overlay technique and the overriding emphasis of the Limiting Vegetal-Soil Factor (LVSEF) ratings in the preparation of Environmental Profile-Step 3.

D. COST ANALYSIS

1. Background: Expenditure Process

The operating budget is a plan which shows estimated direct costs and manpower required to produce a certain output level of work. During the course of the fiscal year, the cost-based Operating Budget serves as one means by which the Bureau Directorate can measure the progress of the Bureau toward the accomplishment of its program. Also, the Operating Budget is one means by which the Bureau line managers can maintain effective management control over their current year programs and can direct these programs to full accomplishment. The operating budget and work planning system is cost-based, fully integrated with regard to programming-budgeting-accounting-progress reporting classifications, shows costs in terms of dollars and manpower input against work output, provides managerial flexibility, and frees line managers from the burden of individual fiscal restraints which are now managed on a broader level.

The operating budget is not an allotment of funds. The Bureau has only one allotment of funds, which is made to the Chief, Division of Budget and Program Development in Washington. He is the only person who is accountable under law for any over-obligation of funds in the Bureau and is the only one subject to violation of the Anti-Deficiency Act, if any activity total is exceeded. Bureau-wide, State Directors and District Managers do not receive an allotment of funds; they receive approved annual work plans which are their operating budgets. Approval is a responsibility of the Director, with staff input and advice from all concerned divisions.

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The sum of the operating budgets represents the Bureau's commitments to the OMB and Congress. As such, it is a pledge that when the Bureau is provided money and manpower, it will be used to accomplish the goals promised. The emphasis then, is directed towards the accomplishment of the physical goals, as set out in the operating budgets, with responsibility regarding the use of the available resources to do the job in the most efficient and effective, least-cost manner.

The intention of the operating budget is to give State Directors, District Managers and other program managers the flexibility necessary for effective program management. Primary emphasis is upon program accomplishments. The manager's goal, under this concept, is to accomplish the established program goals by using the most effective and least costly means in terms of dollars and manpower. At the Washington level the direct cost information included in the state report is "bridged" to total obligations by the inclusion of Bureauwide information on net changes in stores inventories, difference between leave taken and leave funded, and change in unliquidated obligations. At this level the point is reached where allowances become limitations. The direct costs incurred have a definite effect on these limitations, but there is considerable latitude within the Bureau at the various subordinate management levels. The object of the Operating Budget System is to make the maximum use of this latitude as necessary to achieve the Bureau's commitment of accomplishments.

The flexibility of the operating budget system cannot be attained unless program managers use this tool as a management device,

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not only for their particular unit but also for the entire Bureau program. This means that operating level managers must look ahead and advise the next highest level of management when it is apparent that cost or man-month utilization is deviated either up or down from the annual operating budget and the effect of this on the program accomplishment. It is equally important that timely decisions are passed down through the management levels, so that the operating manager can shift work emphasis when necessary.

The Operating Budgets are developed on a direct cost-basis in order to provide management with a picture of the direct cost (in terms of dollars and manpower) of accomplishing the units of work planned. The Direct Cost is the salary and benefits earned by employees for actual work performed and the value of goods and services used in accomplishing work units. This term excludes the salary and benefits of employees for leave taken and the accruals for this purpose, changes in stores, and changes in unliquidated obligations. (These items are handled on a Bureauwide basis and do not affect the field reports.)

To keep track of program expenditures and progress BLM has instituted Job Document Reports (JDR) and Work-Job Code (WJC).

a. Job Document Report

The JDR System provides support for the Annual Work Plan, and statistical information on an inquiry basis in any specified format. The system may also be used to provide an inventory of jobs for development of maintenance schedules and to monitor

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AWP progress as necessary. The objectives of the Job Documentation Report are to provide a uniform procedure for entering individual jobs into the Annual Work Plan, Progress Reporting and to form a data bank containing empirical information for a specific job.

The Job Documentation Report is the vehicle by which the various subactivities may develop AWP inputs, report progress, and contain rapid recall of individual, or a series of jobs. The JDR System now provides a versatile information source adapted to ADP procedures which may be utilized to make adjustments in the Operating Budget, for Progress Reporting, and has the capability to augment the Bureau Planning System through maintenance or updating of the Unit Resource Analysis and Management Framework Plan. It also enables district and state offices to develop normal year maintenance schedules. It is the responsibility of each ranking field official to see that the goals set forth in the Operating Budget are met and that timely submissions of Progress Reports are made. Responsibility for the Job Documentation Reporting System rests with the Assistant Director for Administration.

The JDR System forms the basis for preparing and reporting progress of jobs accomplished in any given fiscal year. The data accumulated and stored each fiscal year is available.

The Data Bank provides information for:

- Public Land Statistics
- Job listing for District Project Summary
- Complete job listing to develop annual State/District maintenance schedules

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- Public Land Statistics
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- Complete job listing to develop annual State/District maintenance schedules

- Inquiries from the public, Congress, and other agencies
- Job listing by treatment practice

Potential uses of the Data Bank are:

- Job listing by Planning Unit for updating the Unit Resource Analysis and Management Framework Plans
- Summary of accomplishments by State/District/County and Subactivity/Work-Job Codes
- Summary of anticipated benefits by primary objectives.

This data is coded for automatic data processing (ADP).

Four types of printouts are available on an annual, monthly, or on-call basis for District/State/Bureau use: Maintenance Schedule, Operating Budget, Progress Report, Specific Inquiry.

- (1) The Maintenance Schedule is provided to States routinely prior to Budget Year AWP submission for use in development of maintenance AWP.
- (2) The Operating Budget is provided to States upon approval of current fiscal year AWP
- (3) The Progress Report is a product of current job completions and provided to States on a monthly basis.
- (4) Specific Inquiry Reports are available upon request of the District Manager, State Director, or other authorized official. Specific inquiries are evaluated for applicability Bureauwide. All requests are forwarded through appropriate State or Service Center Directors.

b. Work Job code (WJC)

These codes provide a standardized system of grouping similar types of work for use in accounting, programming, planning, budgeting and constructive analysis of Bureau work accomplishments. Each BLM employee has the responsibility to code time and attendance and obligation documents in conformance with the WJC as instructed in BLM manual 1634.

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c. Personnel

Manning levels within BLM are determined by assigned organizational ceiling and Annual Work Plan levels. When new program emphasis required an increase in manpower, this is included within the allocation process. The feedbacks between BLM and the appropriation process are included in steps leading to an operation budget with regards to packages, programs, and advices.

2. The Incremental Cost Generated by NEPA

The cost of NEPA to BLM can be defined as the increase in the cost of BLM activities resulting from implementing this statute. Mathematically, the cost of BLM operations is a function of outputs which are a function in input costs and constraints (including laws such as NEPA). The objective is to find the incremental cost associated with the requirements of NEPA.

The costs can be measured in several ways. The best way would be to assess what BLM had to forego when it implemented NEPA. These foregone benefits (or opportunity cost) would be in terms of time diverted from other Bureau activities such as grazing allotment plans or lease applications. This is difficult to measure unless all budget requests were given an ordered preference and then subjected to NEPA requirements so that programs which went unaccomplished could be listed. Alternatively, an analysis could be made of task accomplishments pre and post NEPA. This would be correlated with budget levels to forecast the number of tasks accomplished in NEPA had not been implemented. This may show

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the costs of NEPA in terms of foregone programs, but only if strong assumptions are made with regard to the comparability of past and present projects and manpower requirements. These assumptions make this approach subject to criticism and of limited credibility and value.

The cost of NEPA in terms of additional employment is also immeasurable. Few or zero employees may have been added solely to implement NEPA and it is difficult to see what percentage of their time actually goes into NEPA generated work. Similarly, additional overhead expense cannot be calculated.

An analysis of NEPA cost is best modeled in terms of special materials costs (for example, special consultant services) and direct labor charges. Direct labor charges can be tracked by a suitable time coding system. The question is whether the present BLM time coding system is adequate to track NEPA costs.

When NEPA was signed into law, the BLM was already evolving and developing its Planning System to include more environmental analysis type activities. After NEPA enactment and based on Departmental and Bureau guidelines, changes were made in the Planning System to accommodate NEPA requirements. Bureau-wide EIS guidelines were promulgated and followed by guidance for environmental analysis and EAR preparation. Given these changes engendered by NEPA, the BLM modified its Work Job Code (WJC) Definitions in BLM Manual Section 1634. WJC's are categories to which Bureau employees charge their time.

WJC 3006 was established to cover the cost and time spent developing resource activity information and analysis as needed

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for the review of Environmental Impact Statements in response to formal or informal requests from other agencies. This procedure is in response a legal requirement of NEPA. As such, all time coded to this number can be attributed to NEPA. This number should reflect the cost associated with assisting other agencies.

The Bureau's internal costs generated by NEPA are not as easily assessed. The BLM designated only one job category, WJC 3806, to cover NEPA type work within the Bureau. WJC 3806, as defined in BLM Manual Section 1634, "includes cost and time spent developing and compiling an environmental analysis, preparing 102 Environmental Impact Statements and holding 102 statement hearings for BLM actions. Work will be coded to this WJC when BLM actions or projects are defined by written criteria as having significant effect on the quality of human environment or when otherwise determined that an environmental analysis resulting in documentation is required". This definition illustrates some of the problems associated with arbitrarily using this WJC. For it is not possible to differentiate or allocate time to the conduct of the following.

- a. developing and compiling an environmental analysis;
- b. preparation of Environmental Analysis Records;
- c. preparation of Environmental Impact Statements;
- d. holding EIS hearings for BLM actions.

There is no further breakdown of 3806 as it is the lowest unit number to be coded. Thus EIS work and time is not recorded as a separate time code, but rather lumped with environmental analysis, which is difficult to define strictly. For BLM, with

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its many resource responsibilities, the distinction between environmental analysis, and other resource management functions remains unclear and undefined. When a BLM employee codes time to WJC 3806, management has no way to know whether the employee was working on regular Bureau environmental analysis or an EAR or a 102 statement.

The Washington office of the BLM has provided information concerning the direct costs involved in WJC 3006 and 3806 for fiscal years 1972, 1973 and 1974 as illustrated in BLM Plate 10. The Bureau provided the following environmental work costs to the BLM:

1972	\$2,559,000
1973	3,804,000
1974	4,700,000 (estimated)

These figures include fixed and variable costs such as 17 percent for leave surcharge, approximately 33 percent for overhead or administration, contractual work and training. As an example, the Washington Office provided the breakdown of the above FY 1973 environmental work by major programs as follows:

<u>Program</u>	<u>(\$000's)</u>	<u>Description</u>
Native Claims	300	To complete analysis for land designations.
Geothermal Steam	40	Preparation of Environmental Statements.
Surface Protection	350	Environmental analyses required to assess mining and rehabilitation plans.
Inventory & Planning	500	Complete environmental impact analyses necessary for land and resource planning.

Managers & Supervisors	200	for food and beverage supplies, employees' personal supplies, employees' uniforms, and transportation fares, related to various working employees' employees
General Distribution	200	employees' employees
General Distribution	40	employees' employees
General Distribution	200	employees' employees

Description

employees' employees as follows:

The Distribution Office provided the personnel of the House LA 1813
of administration, construction work and repair, as an example,
sent for house employees' employees (LA 33) because for employees

These figures include food and beverage costs such as LA 1813

1813	4' 100' 000 (estimated)
1813	3' 800' 000
1813	28' 220' 000

to the HLM.

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each year 1813, 1813 and 1813 as follows: in HLM House
concerning the other costs included in MLC 3000 and 3000 for

The Distribution Office of the HLM has provided information

101 employees

working on various other employees' employees on the day of

2800' employees' employees as well as food, repair, the employees are

employees' employees. After a HLM employees costs have to MLC

employees' employees' and other employees' employees' employees' employees

the other employees' employees' the distribution employees' employees

ENVIRONMENTAL STATEMENT REVIEW									ENVIRONMENTAL ANALYSIS & EIS								
WJC 3006									WJC 3806								
FY 72			FY 73			FY 74			FY 72			FY 73			FY 74		
NO.	M-M	\$	NO.	M-M	\$	NO.	M-M	\$	NO.	M-M	\$	NO.	M-M	\$	NO.	M-M	\$
ALASKA	48	5.5	12,300	141	5.6	12,081	140	19.0	14	40.8	88,800	209	29.9	60,215	930	55.0	
ARIZONA	44	3.7	5,900	49	4.4	7,140	48	13.0	412	12.4	17,800	421	33.3	53,916	671	62.0	
CALIFORNIA	32	7.9	10,800	35	6.0	9,190	65	13.0	152	47.5	66,200	357	122.2	311,817	699	205.0	
COLORADO	116	4.4	6,700	53	6.5	10,452	74	28.7	244	26.3	43,900	465	100.2	150,936	1886	79.2	
IDAHO	29	2.8	4,200	31	4.0	5,982	57	9.0	138	13.5	20,400	1534	36.7	51,007	817	62.0	
MONTANA	37	4.2	6,700	75	4.4	6,485	114	17.8	106	11.8	16,200	502	48.4	66,722	303	87.4	
NEVADA	9	2.8	4,500	3	2.2	20,503	10	2.0	41	17.2	25,800	205	75.9	103,913	282	95.3	
NEW MEXICO	8	3.3	5,200	8	3.4	5,928	6	9.4	3*	47.9	66,200	780	77.5	110,257	749	105.4	
OREGON	12	12.1	16,200	68	4.3	6,145	59	11.0	431	35.0	48,300	1057	200.4	279,376	1190	290.0	
UTAH	1	2.5	3,900	6	3.6	5,474	45	16.0	223	33.8	48,800	423	106.1	145,469	425	162.0	
WYOMING	7	1.1	1,600	10	2.0	2,750	17	2.1	243	14.9	23,500	429	45.8	63,383	724	106.3	
WASHINGTON D.C.	-	16.6	28,800	-	31.1	53,240			-	20.0	63,400	-	13.3	139,805			
DSC	-	2.6	4,500	-	2.0	3,634			-	3.0	5,400	-	19.5	56,055			
PSC	-	1.2	2,400	-	1.6	3,378			-	1.0	3,700	-	7.6	17,339			
OTHER OFFICES	-	-	-	-	0.1	287			-	-	-	-	9.9	15,207			
TOTAL DIRECT COST	343	70.7	113,700	479	81.2	152,669	635	141.0	2007	325.1	538,400	6,382	976.7	1,625,412	8,676	1301.6	

* M-M, Man-Months

** MOST LIKELY CONTAINS PROCESS CODING ERROR

Trans-Alaska Pipeline	70	Assess environmental impacts to pipeline construction proposals.
Outer Continental Shelf	500	In depth studies of areas to be leased.
Lands & Minerals	400	Analyses required to act on other lands and Minerals Applications not included in above.
Range, Forestry, Recreation, Watershed, Wildlife	640	To authorize grazing leases, prepare timber sales, initiate resource improvements etc.
	<u>3,800</u>	

The above amounts represent environmental studies on all significant land management actions. Each category usually includes the costs of thousands of actions blanketing up to several hundred millions of acres. Specifically, Range actions include some 26,000 lease and permit actions; timber involves sales of over 1.2 billion board feet; inventory and planning involves 25 million acres while lands and mineral applications on hand exceed 26,000 cases.

In FY 1974 the increase of \$3.8 million to \$5.7 million is for the purpose of environmental analyses associated with FY 1974 program increases. \$600,000 was specifically requested for environmental work needed to plan and develop energy areas. The remaining \$1.3 million increase for environmental work is associated with the following requested increases: OCS, Geothermal, Surface Protection, Trans-Alaska Pipeline, Inventory and Planning, Off-Road Vehicles, Native Claims, Soil and Watershed Maintenance and Wild Horses.

Wildlife	Range, Forestry, Restoration, Watershed	640	To authorize grazing leases, prepare timber sales, initiate resource improvements etc.
Lands & Minerals		400	Analyses required to act on other lands and Minerals Applications not included in above.
Outer Continental Shelf		500	In depth studies of areas to be leased.
Trans-Alaska Pipeline		70	Assess environmental impacts to pipeline construction proposals.
		3,500	

The above amounts represent environmental studies on all significant land management actions. Each category usually includes the costs of thousands of actions blanketing up to several hundred millions of acres. Specifically, Range actions include some 26,000 lease and permit actions; timber involves sales of over 1.2 billion board feet; inventory and planning involve 35 million acres while lands and mineral applications on hand exceed 26,000 cases.

In FY 1974 the increase of \$3.8 million to \$2.7 million is for the purpose of environmental analysis associated with FY 1974 program increases. \$800,000 was specifically requested for environmental work needed to plan and develop energy areas. The remaining \$1.8 million increase for environmental work is associated with the following requested increases: OCS, Geothermal, Surface Protection, Trans-Alaska Pipeline, Inventory and Planning, Oil-Road Vehicles, Native Claims, Soil and Watershed Maintenance and Wild Horse.

For an estimate of the pure EIS work the Washington Office of the BLM provided the following:

<u>FY</u>	<u>ENVIRONMENTAL WORK</u>		<u>EIS WORK</u>
1972	\$2,559,000	x 20% =	\$ 511,800
1973	3,804,000	x 25% =	951,000
1974	5,700,000	x 29% =	1,743,000

The above percentages were provided as rough estimates, since an accurate determination of the actual cost for pure EIS work by fiscal year would be very difficult and involve a review of time sheets in all State Offices.

The primary question which arises at this point is, how much of 3806 is NEPA generated? Clearly, EIS preparation and hearings are attributable to NEPA. However, difficulty arises concerning Environmental Analysis work and preparation of EAR's. BLM Instruction Memorandum 72-135 established writing Environmental Analysis Records and strongly implies that they are a direct result of NEPA. The environmental analysis is used to determine if an EIS (a NEPA requirement) is necessary and provides a written record of the decision. This memo established a standard Bureau-wide format to analyze and record environmental impact. "It (the format) provides evidence that BLM, on a Bureauwide basis, is legally complying with NEPA on all actions.... Preparation of the environmental analysis record should meet the following objectives:

- a. To improve the quality of BLM actions by identifying the anticipated environmental impacts proposed actions may have and modifying the actions to reduce adverse environmental impacts.
- b. To determine if an environmental statement is required.
- c. To document the justification for not writing an environmental statement when that decision is made."

For an estimate of the pure EIS work the Washington Office of the

BLM provided the following:

<u>FY</u>	<u>ENVIRONMENTAL WORK</u>	<u>EIS WORK</u>
1972	\$2,558,000	\$ 304 = \$ 211,800
1973	\$2,864,000	\$ 324 = \$ 251,000
1974	\$2,700,000	\$ 324 = \$ 245,000

The above percentages were provided as rough estimates, since

an accurate determination of the actual cost for pure EIS work by

fiscal year would be very difficult and involve a review of time sheets

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Recently (August 1973), the BLM completed its response to a NEPA requirement for an initial assessment analysis with its issuance of BLM Draft Manual Section 1791, which presents detailed and descriptive procedures and format items for the preparation of the EAR. These developments strongly substantiate the influence of NEPA in the evolution and development of the EAR. Therefore, the time charged to WJC 3806 for EAR preparation can be attributed to NEPA.

Environmental Analysis work, except that which is involved in an EAR, is an integral part of the BLM Planning System process. Therefore, the cost for such analysis should not be considered as NEPA generated costs. However, the identification and separation of this cost is not presently possible under WJC 3806 which lumps together all EA, EAR, EIS, and EIS hearing costs.

Other incremental costs include the time and dollars spent reviewing environmental work. The BLM has imposed upon itself two lengthy, time consuming review processes concerning environmental work. The first concerns the review procedures established for EAR's recommending preparation of environmental statements. If the State Director concurs with an EAR's recommendation for an EIS, he must submit the EAR for Washington Office review. By requiring this review at the Washington level, the BLM incurs a cost in terms of the time it must spend deciding whether or not the proposed action requires an EIS. If the Washington Office were relieved of this EIS determination task, it could allocate its time to other uses. The opportunity cost of the Washington level review is the other uses of its time which are foregone. For example,

if Washington Office personnel were freed from reviewing EAR's recommending EIS preparation, they could spend more time for refining and improving the BLM Planning System.

The second process involves the time spent at the Washington level for reviewing draft EIS's prior to submission to CEQ. This review procedure normally covers at least six months and in many instances exceeds one year. If the process were streamlined and the time of review reduced, the Washington level personnel could devote more time and effort to other Bureau endeavors.

3. Cost Allocation Scheme

A percentage split of time allocated to the present WJC 3806 (net time spent on environmental analysis, EAR, and EIS) could be implemented. However, such an arbitrary split is highly subjective and possibly biased.

A cost tracking system is required for NEPA generated costs. Such a system would enable the Bureau to determine precisely its cost of operation and preparation of its budget, especially in areas covering environmental work.

BLM costs may be viewed as comprising of planning costs, resource management costs and NEPA generated EAR and EIS costs. As an alternative, the Bureau could redefine WJC3806 to include only NEPA generated costs, that is, EAR and EIS work and EIS hearings. Environmental analysis (not to be confused with preparation and development of an EAR) would require either its own WJC or inclusion in appropriate planning WJC's. Another alternative would include establishing separate WJC's for environmental analysis, EAR work, and EIS preparation and hearings.

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E. NEPA INTEGRATION

To interphase the mandated elements explicit in NEPA and the CEQ Guidelines (August 1973) with the observed planning and decision making processes of the Bureau, an analytical baseline has been designed. This baseline is in the form of criteria, which represent requirements imposed on all Federal agencies by NEPA, Executive Order 11514, and CEQ Guidelines (August 1973). Under the general categories of Policies, Plans and Programs, and EAR/EIS process, the appropriate criteria have been located and enumerated. For each criterion, findings and observations are presented.

1. POLICIES

Criterion 1: All agencies shall review their administrative regulations, policies, and procedures, including those relating to loans, grants, contracts, leases, licenses, or permits, in order to identify any deficiencies or inconsistencies therein which prohibit or limit full compliance with the purposes and provisions of the Act.*

a. Findings

- (1) The intent of NEPA was meant to permeate the objectives, policies and procedures of the planning system and to infuse into that system an appropriate and careful consideration of the environmental aspects. In 1967, the Bureau of Land Management initiated its planning system from which evolved and developed the Unit Resource Analysis (URA) and the Management Framework Plan (MFP) concept. When Public

*Executive Order 11514, March 5, 1970, Sec. 2 (d)

Law 91-190 (NEPA) was signed on January 1, 1970, the Bureau issued Instruction Memo 70-23 dated January 27, 1970, which stated:

"Until we receive instructions and prepare detailed procedures for carrying out the purpose of the act, we will adjust our operations to meet the above-mentioned requirements. The Bureau Planning System provides an excellent mechanism for incorporating environmental considerations in our planning and decision-making. We are in better position than many others to analyze environmental dangers and opportunities involved in public land management."

With the passage of NEPA, the BLM decided to maintain the present structure of the Planning System and supplement its system at critical points to fulfill NEPA requirements. The Bureau intends to maintain the MFP, which has been designed to develop and establish a land use and resource management plan for a planning area. The MFP promulgates land use allocations and functions as a reference to guide future activities and actions. Rather than merge the developing planning system with the features of NEPA, the Bureau has appended to its planning system new manual releases concerning the EAR (BLM Manual 1971), EIS (BLM Manual 1972), and the Environmental Profile (BLM I. M. 73-269 Draft Manual for Section 1605). In effect, the Bureau has accommodated rather than integrated the features of the Act.

of the Act.

Bureau has recommended rather than integrated the features I.M. 73-285 Draft Manual for Section 1005. In effect, the (BLM Manual 1973), and the Environmental Profile (BLM releases concerning the EAR (BLM Manual 1971), EIS Bureau has appended to its planning system new manual developing planning system with the features of NEPA, the guide future activities and actions. Rather than merge the gates land use allocations and functions as a reference to management plan for a planning area. The MRP provides designed to develop and establish a land use and resource The Bureau intends to maintain the MRP, which has been its system at critical points to fulfill NEPA requirements. present structure of the Planning System and supplement With the passage of NEPA, the BLM decided to retain in the opportunities involved in public land management.

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- (2) The Bureau has added, rewritten or amended its objectives, management principles, planning assumptions, and district land use guides primarily to incorporate concepts and policies contained in NEPA. Inserted into the BLM's objectives were comments stressing the protection and management of the environment. Added were assumptions for environmental quality which enumerated environmental values and characteristics to be included in Bureauwide activities. Lastly, policy statements for each program activity have been revised to reflect environmental considerations. NEPA is now cited as an authority in most of these policy statements. The Bureau is currently preparing Program Decision Criteria and District Program Guides.
- (3) The Bureau does not consider the MFP to be an action or a resource allocation decision but rather a framework to guide management decisions. The MFP allocates and specifies land uses in the planning unit but according to the BLM does not represent an action with potential widespread spinoffs. No EAR or EIS accompanies the MFP to disclose potential impacts which could be significant to the environment. While the BLM will prepare the EAR and perhaps the EIS for a proposed action, it does not believe that the consequences of the MFP, from which emanates future actions, justify a formal environmental analysis.
- (4) BLM policies, objectives and manual directives provide field office with generally adequate guidance concerning what

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(4) BLM policies, objectives and manual directives provide field offices with generally adequate guidance concerning what

to do, but relate very little, if any, guidance concerning how to perform certain operational functions within the Planning System context. BLM field personnel find this problem to be a source of concern and believe that the availability of and instruction in techniques to accomplish various responsibilities are essential. Problem areas include the following examples:

- (a) In URA Step 4, the resource specialist has a limited number of techniques available to generate technically feasible management opportunities and capabilities for his resource. The rationale for his single use plan is not traceable.
- (b) The transition between URA Step 4 (Resource Capabilities and Opportunities) and MFP Step 1 (Program Activity Recommendations) is very weak. The resource specialist is provided limited direction in terms of basic objectives for management and development of his resource to meet specific needs.*
- (c) In MFP Step 2, the Bureau provides field offices with a limited number of techniques (overlays and group interaction) to resolve land use and resource management conflicts.

*The Utah State Office has successfully addressed this problem area with supplemental guidance and directives to BLM 1608. See case study section.

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- (c) In MFP Step 2, the Bureau provides field offices with a limited number of techniques (overlays and group interaction) to resolve land use and resource management conflicts.

The Utah State Office has successfully addressed this problem area with supplemental guidance and directives in ELM 1803. See case study section.

(d) Under the present system, it is difficult to trace multiple use and support recommendations generated in MFP Step 2 through the system as to how they were accepted, modified or discarded. There is no requirement for the documentation of the evolution of these recommendations and their alternatives.*

(e) Once the MFP document has been completed, the Bureau provides no direction as to how a field office should initiate and implement actions in the absence of program activity planning procedures and what action should be taken to move from the MFP to activity planning process.

The Bureau is currently revising sections of its planning manual to address most of these problem areas; however, these revisions are presently in draft form for the URA and MFP and have not been operationalized. The Denver Service Center is developing techniques to be applied in MFP Step 2. The Districts, in the interim, must continue to operate with this major problem area unresolved.

- (5) The management Action Plan/Multi-Year Program (MAP/MYP) currently is being developed to address an identified need for standardizing program objectives in output terms

*Refer to Redding District and Utah State Office findings related to the planning system in the case study section. Both field offices have initiated their own procedures to address this problem area.

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and to better coordinate and provide the missing link between (1) Land Use and Development Planning and Program Planning, and (2) The Planning Systems (specifically Program Planning) and the Program and Financial Management System. MAP/MYP provides the necessary relation between long term budgeting and the Annual Work Plan and between the objectives and responsibilities of the BLM and the role of the MFP.

- (6) In compliance with CEQ Guidelines, the BLM has developed the Environmental analysis Record (EAR) to determine whether or not an EIS is required. The EAR is the initial assessment and decision document regarding the question of significance and need for EIS preparation.
- (7) The Bureau has imposed a highly centralized, top-down control system relative to the decision to prepare the environmental statement. Essentially, the "go" decision on statements remains vested in and controlled by the Secretary of Interior. While the delegation of authority to field office level positions to prepare the environmental statement has not been made and in actuality has been retained at the Secretarial office level, the decision not to prepare the statement does reside at the field office level and concurrence by a higher Bureau authority is not necessary.
- (8) The Department of the Interior has lengthened the decision making process for the EIS by the establishment of a cumbersome clearance/review/concurrence cycle. As presently

designed, the decision to produce the statement, the review of the draft statement and the approval of the final statement must pass repeatedly from the District Office, to the appropriate State Officer then to the Washington Office of the BLM, and ultimately to the Secretary's Office of the Department of the Interior. The effect of this decision hierarchy slows decision-making related to the EIS. This hierarchical system is the creation of the Department of the Interior and not NEPA. While fulfillment of the requirements of NEPA consumes more time than the project approval system which existed before NEPA, NEPA was not intended to be used as a mechanism to increase the length of time for decision making.

- (9) To ease the agency caseload, the Bureau has prepared programmatic statements for various resource activities by geographic area. The programmatic statement presents the anticipated environmental effects common to a particular resource activity. While the intent of the programmatic statement is to reduce EAR/EIS case work, the programmatic statement by its very nature is inadequate to substitute for an EAR/EIS at the micro level. The programmatic statement is too broad at the macro level to delineate the environmental effects of a specific action. As information contained in the programmatic statement is general and not oriented to location, it cannot help the District make a decision at the local level. The programmatic statement has become a tool for reference rather than one for decision making.
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- (10) The degree of integration of BLM policies, objectives and management principles in Planning System operation is somewhat dependent on the existing staff size and manpower in the field offices. Since its inception in 1967, the BLM planning system has been designed and developed for the existing manpower and qualifications of its personnel in the field. The URA-MFP process revolves about and accommodates the individual resource specialists, and the Bureau today continues to hire these specialists to fulfill requirements of the planning system.
- (11) To meet the demands of EAR and EIS preparation given present funding levels, BLM manpower has been shifted from field work to the preparation of EAR's and EIS's. The manpower shift has been necessitated by the passage of NEPA which incurred an increase in the BLM workload in terms of analyses and data requirements essential for EAR/EIS preparation. Thus, projects in the field which otherwise would have been completed have been postponed to fulfill EAR and EIS demands.
- (12) The Bureau's internal costs generated by NEPA are not easily assessed. The BLM has designated only one job category, work Job code (WJC) 3806, to cover environmental and NEPA related work within the Bureau. There is no further breakdown of 3806, as it is the lowest unit number to be coded. Further, it is not possible to differentiate or allocate time to the conduct of the following:

(10) The degree of integration of BLM policies, objectives and

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- a. developing and compiling an environmental analysis;
- b. preparation of Environmental Analysis Records;
- c. preparation of Environmental Impact Statements;
- d. holding EIS hearings for BLM actions.

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Thus, EIS work and time are not recorded as a separate time code but rather lumped with environmental analysis, which is difficult to define strictly.

The BLM has imposed upon itself two lengthy, time consuming review processes concerning environmental work. By requiring the decision to approve the preparation of the EIS at the Washington level, the BLM incurs a cost in terms of the time it must spend deciding whether or not the proposed action requires an EIS. The opportunity cost of the Washington level review is the other uses of its time which are foregone. The second process involves the time spent at the Washington level for reviewing draft EIS's prior to submission to CEQ. This review procedure normally covers at least six months and, in many instances, exceeds one year. The time consumed by excessive review procedures has an associated cost in foregone labor.

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Criterion 2: CEQ Guidelines require the agencies to identify the types and classes of actions likely to require the statement and those actions likely not to require the statement.*

*CEQ Guidelines, Part 1500.6 (c)

- a. developing and compiling an environmental analysis;
- b. preparation of Environmental Analysis Records;
- c. preparation of Environmental Impact Statements;
- d. holding EIS hearings for FLM actions.

Thus, EIS work and time are not recorded as a separate time code but rather lumped with environmental analysis, which is difficult to define strictly.

The BLM has imposed upon itself two lengthy, time-consuming review processes concerning environmental work. By requiring the decision to approve the preparation of the EIS at the Washington level, the BLM incurs a cost in terms of the time it must spend deciding whether or not the proposed action requires an EIS. The opportunity cost of the Washington level review is the other uses of its time which are foregone. The second process involves the time spent at the Washington level for reviewing draft EIS's prior to submission to LEO. This review procedure normally covers at least six months and, in many instances, exceeds one year. The time consumed by excessive review procedures has an associated cost in foregone labor.

Criterion 2: GEO Guidelines require the agencies to identify the types and classes of actions likely to require the statement and those actions likely not to require the statement.

a. Findings

- (1) The Bureau has not yet determined the types and classes of actions which would require the EIS. The BLM conducts, at the very least, an environmental analysis for all proposed actions. The environmental analysis is an informal, undocumented, day-to-day assessment of environmental issues. The Bureau prescribes preparation of the EAR for most actions; however, it has not enumerated the classes of actions which likely would require an EIS. The Bureau believes each action must be judged on its own merit and efforts are futile which attempt to generalize and establish classes of actions which require the preparation of the EIS.

2. PLANS AND PROGRAMS

Criterion 1: Identify and develop methods and procedures which will insure that presently unqualified environmental amenities and values may be given appropriate consideration in decision-making along with economic and technical considerations. Initiate and utilize ecological information in the planning and development of resource-oriented projects.*

(a) Findings

- (1) The Bureau has attempted compliance by the development of the Environmental Profile and the EAR/EIS process. The Environmental Profile collects environmental data and synthesizes the data by the overlay technique to express ecological interrelationships. The EAR/EIS permits an analysis

*NEPA, Section 102 (B), (G).

(1) The Bureau has not yet determined the types and classes of actions which would require the EIS. The EIS is not, at the very least, an environmental analysis for all proposed actions. The environmental analysis is an informal, unstructured, day-to-day assessment of environmental impacts. The Bureau prescribes preparation of the EIS for most actions; however, it has not enumerated the classes of actions which likely would require an EIS. The Bureau believes each action must be judged on its own merits and efforts are being made to generate and establish classes of actions which require the preparation of the EIS.

2. PLANS AND PROGRAMS

Criterion 1: Identify and develop methods and procedures which will insure that proposed regulated environmental activities and values may be given appropriate consideration in decision-making along with economic and technical considerations. Initial and other ecological information in the planning and development of resource-oriented projects.

(a) Findings

(1) The Bureau has attempted compliance by the development of the Environmental Profile and the EAB/EIS process. The Environmental Profile collects environmental data and synthesizes the data by the overlay technique to express ecological interrelationships. The EAB/EIS permits an analysis

of the significance and extent of potential adverse environmental impacts attendant to a proposed action. The Bureau believes that its planning system without the Environmental Profile and EAR/EIS process does not ignore environmental considerations. Environmental factors have always been a component in decision-making but not to the extent and degree facilitated by the two formalized procedures.

- (2) In the preparation of the EAR, the role of the information system, URA, is unclear. While the URA is the data baseline upon which analyses are founded, the BLM finds that the more complex the action, the information requisite to the analysis becomes inadequate. At this point, the agency would further its data collection process. The concern is that if the Bureau has not the necessary information to prepare the EAR, then did the Bureau have sufficient data to produce the land use plan from which the action ensued?

Criterion 2: Utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision-making which may have an impact on man's environment.*

(a) Findings

- (1) The collection of data is not in accordance with a true interdisciplinary approach. While data general to the planning unit are gathered, URA Step 4 specifies the "tunnel vision" approach, in which the assembled data specific to an individual resource activity are analyzed for resource

*NEPA, Section 102 (A)

of the significance and extent of potential adverse environmental impacts attendant to a proposed action. The Bureau believes that its planning system within the Environmental Profile and EAR/EIS process does not ignore environmental considerations. Environmental factors have always been a component in decision-making but not to the extent and degree facilitated by the two formalized procedures.

(2) In the preparation of the EAR, the role of the information system, URA, is unclear. While the URA is the data base upon which analyses are founded, the ELM finds that the more complex the action, the information required to the analysis becomes inadequate. At this point, the agency would further the data collection process. The concern is that if the Bureau has not the necessary information to prepare the EAR, then did the Bureau have sufficient data to produce the EAR and has plan from which the action ensued?

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(a) Findings

(1) The collection of data is not in accordance with a true interdisciplinary approach. While data general to the plan and will are gathered, URA Step 4 specifies the "detailed vision" approach, in which the assembled data specific to an individual resource activity are analyzed for resource

capabilities and opportunities independent of the other resource activities. Although the resource specialist may utilize the information of other resource specialists, he remains directed by Bureau procedures to collect the data necessary and appropriate to determine the development opportunities for the resource. Thus a data base has been established for each resource. When new data have been noted which might apply to a number of the resources, they must be inserted into the data base established for each resource. Simultaneous to the resource opportunities developed in URA Step 4 using the data gathered in URA Step 3 is the preparation of the Environmental Profile which does not interact with the URA information system until the MFP Step 2.

(2) The interdisciplinary approach enters the BLM planning system in MFP Step 2 in the development of multiple-use recommendations for the planning unit. Each resource specialist has developed the best possible plan for his resource, and now the seven resource specialists empanel, each advocating his plan. During this interaction, conflicts, overlaps, inconsistencies, and problems are identified and analyzed, from which multiple-use recommendations are formulated. Representatives of the social sciences are absent unless these disciplines are part of the resource specialist's background.

Criterion 3: Develop procedures to ensure, the fullest practicable provision of timely public information and understanding of Federal plans and programs with environmental impact in order to obtain the views of interested parties.*

*Executive Order 11514, Section 2 (b).

Criterion 3: Develop procedures to ensure the highest possible
the provision of timely, useful information and understanding of
Federal plans and programs with environmental impact in order
to obtain the views of interested parties.

*Executive Order 11514, Section 2 (b).

a. Findings

- (1) NEPA has caused a greater concern over developing public participation and input in the BLM Planning System activities. District personnel believe that NEPA has opened up the BLM Planning System by providing the public with the opportunity to comment upon and concur with BLM projects and actions. On the other hand, while the BLM Manuals for the URA and MFP indicate that public participation is required, they do not specifically identify when public participation should be sought and inputted. From the case studies, public input normally occurs in URA Step 3 for information and data, and between MFP Steps 1 and 2 in the decision-making process for the resolution of resource conflicts.
- (2) The EAR does not require formal public input, but many districts have found it politically wise to include some level of public feedback depending on the dimension and scope of the proposed action. According to BLM Manual 1792 formal public hearings are discretionary in the EIS process: "Although public meetings and hearings are not required for all environmental statements, the Bureau will follow a policy of assuming that the public has a full opportunity to participate in the process of statement preparation."*

*BLM Manual 1792.26 of June 16, 1972; also BLM Instruction Memo 73-40, Review and Comments for Proposed Revision of Manual 1972 in BLM Manual Section 1972.26, October 10, 1973.

(1) NEPA has created a greater concern over developing public participation and input in the BLM Planning System activities. District personnel believe that NEPA has opened up the BLM Planning System by providing the public with the opportunity to comment upon and concern with BLM projects and actions. On the other hand, while the BLM Manuals for the URA and MFP indicate that public participation is required, they do not specifically identify when public participation should be sought and inputted. From the case studies, public input normally occurs in URA Step 2 for information and data, and between MFP Steps 1 and 2 in the decision-making process for the resolution of resource conflicts.

(2) The BLM does not require formal public input, but many districts have found it politically wise to include some level of public feedback depending on the dimension and scope of the proposed action. According to BLM Manual 1793 formal public hearings are discretionary in the EIS process. Although public meetings and hearings are not required for all environmental statements, the Bureau will follow a policy of assuming that the public has a full opportunity to participate in the process of statement preparation.

*BLM Manual 1793.25 of June 18, 1973; also BLM Instruction Memo 73-40, Review and Comments for Proposed Revision of Manual 1793 in BLM Manual Section 1793.25, October 10, 1973.

Public involvement during the EAR tends to be local, while participation at the EIS area is more regional and national in character due largely to the review and public input mechanisms inherent in the EIS process. Since few actions result in the preparation of an EIS, these actions have been exposed only to a local audience.

Criterion 4: Develop a range of alternatives to the proposed plan which involves unresolved conflicts concerning alternative uses of available resources.*

a. Findings

(1) At URA Step 4 the resource specialist develops a single development plan for his particular resource given no economic, political, and social constraints and no consideration for other resources existing in the planning unit. In some of the case studies area managers report that resource specialists are not adequately developing opportunities and capabilities for their respective resources.

(2) During the MFP process, the generation of alternatives may occur at MFP Step 2. The MFP is prepared to reconcile major land and resource use conflicts and to apply direction, objectives and constraints for each resource and Program Activity within a specific geographical area. The output of the MFP is a multiple land use plan designed to display how

*NEPA, Section 102 (D)

**BLM Draft Manual for URA (1605), IM 73-269

Public involvement during the NAK tends to be local, while participation at the EIS level is more regional and national in character due largely to the review and public input mechanisms inherent in the EIS process. Hence low actions result in the preparation of an EIS, these actions have been exposed only to a local audience.

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(2) During the MTP process, the generation of alternatives may occur at MTP Step 2. The MTP is prepared to reconcile major land and resource use conflicts and to apply direction, objectives and constraints for each resource and Program Activity within a specific geographical area. The output of the MTP is a multiple land use plan designed to display how

the planning unit should be managed. The process designated to articulate and resolve land use conflicts occurs at MFP Step 2. At this point, the resource specialists empanel, present their individual resource development plans, note the inconsistencies which arise when all the plans have been aggregated, and develop a single multiple-use recommendation. For most Districts, the MFP does not generate any land use alternatives other than the one which is ultimately submitted for approval by the District Manager.

Criterion 5: Monitor, evaluate, and control on a continuing basis their agencies activities so as to protect and enhance the quality of the environment. Such activities shall include those directed to controlling pollution and enhancing the environment and those designed to accomplish other program objectives which may affect the quality of the environment.*

a. Findings

- (1) The Bureau has not developed a system that monitors the overall environment effects of implemented actions. An informal environmental inspection of past and ongoing actions occurs, as BLM personnel perform their activities in the field and observe changes in the environment that existed prior to action implementation.
- (2) The Bureau holds formal reviews at periodic intervals of Bureau activities and operations at the

*Executive Order 11514, Sec. 2(a)

the planning unit should be managed. The process design-
 based to articulate and resolve land use conflicts occurs
 at MRP Step 3. At this point, the resource specialists
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 multiple-use recommendation. For most Districts,
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Criterion 2: Monitor, evaluate, and control on a continuing
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 activities in the field and observe changes in the
 environment that existed prior to action implementation.
- (2) The Bureau holds formal reviews at periodic inter-
 vals of Bureau activities and operations at the

District level. Performance is evaluated and recommendations for improvement are presented by the reviewing committee.

- (3) The District Manager, in his capacity as the ultimate MFP decision maker, integrates to some extent the MFP's prepared for the District's planning units. Although the BLM requires planning coordination between districts, there exists little coordination among contiguous planning units. Further, the state offices do not engage in the overall coordination of MFP's generated at the planning unit level.

Criterion 6: Engage in exchange of data and research, and cooperate with agencies of other governments to foster the purposes of the Act.*

a. Findings

- (1) The Bureau works with all levels of governments to obtain the data it otherwise would have researched independently. The agency does not appear reluctant in this regard.

3. EAR/EIS PROCESS

Criterion 1: Agencies are required to make an initial assessment of the environmental impacts for the proposed action. This is the decision document and/or level for the determination of significant effects and recommendation to prepare the EIS.**

*Executive Order 11514, Sec. 2(e)
**CEQ Guidelines, Part 1500.2(b)

District level. Performance is evaluated and recommendations for improvement are presented by the reviewing committee.

(2) The District Manager, in his capacity as the ultimate MFP decision maker, integrates to some extent the MFP prepared for the District's planning needs. Although the BLM requires planning coordination between districts, there exists little coordination among contiguous planning units. Further, the state offices do not engage in the overall coordination of MFP's generated at the planning unit level.

Criterion 6: Engage in exchange of data and research, and cooperate with agencies of other governments to foster the purpose of the Act.*

a. Findings

(1) The Bureau works with all levels of governments to obtain the data it otherwise would have researched independently. The agency does not appear reluctant in this regard.

3. EARLIER PROGRESS

Criterion 1: Agencies are required to make an initial assessment of the environmental impacts for the proposed action. This is the decision document and/or level for the determination of significant effects and recommendation to prepare the EIS.*

*Executive Order 11514, Sec. 2(c)
*CEQ Guidelines, Part 1500.2(b)

a. Findings

(1) The BLM response has been the EAR, which provides the analysis to determine significance. In compliance with NEPA, the EAR is the go/no go decision for the EIS.

(2) The Bureau has developed guidance to permit the District Office to write an EAR at a level of analytical detail commensurate with the type of proposed action and nature of the environment in which the action takes place.

To this end, the Bureau suggests three levels of detail

(1) for EAR preparation, high, medium, and low given the nature of the proposed action. Also, the Bureau specifies the kinds of actions by title and example that require an EAR of a high level of detail.

(3) For the EAR, impacts residual to the environmental analysis and the degree of controversy define the decision to prepare the environmental statement.

The following is a summary of the methodology for determining significance. Initially, the potential impacts, both beneficial and adverse, arising from the proposed action are enumerated. Afterwards, mitigating or enhancing measures to reduce these impacts are identified. The residual impacts are the net result of the application of the mitigating measures to the anticipated impacts. The examination of the residual impacts for significance is the decision for EIS preparation.

(4) Procedures do not require EAR public review and inter-agency comments.

(5) BLM Manual 1791 Environmental Analysis specifically prescribes that cost benefit justification is not in order in the analysis of alternatives included in an EAR.

Criterion 2: The EIS serves as a means of assessing the environmental impact of proposed actions rather than as a justification for the implementation of the proposed action.*

a. Findings

(1) While the EAR does assess the environmental impact of proposed actions, there is some concern that the EAR justifies the proposed action. The individual involved in the development of the URA, MFP and PAP is often given the responsibility for preparation of the EAR. Consequently, there is a psychological bias on the part of the EAR author to substantiate the proposed action he initiated by virtue of his participation in the planning system.

(2) The BLM EIS content requirements are in accordance with CEQ Guidelines. It has been difficult to judge the EIS's of the BLM as a mechanism to assess environmental impact since few statements have been produced.

Criterion 3: When more than one agency sponsors an action, the involved agencies should consider the preparation of a joint state-

*CEQ Guidelines, Part 1500.7 (a)

ment or designate one of the participant agencies as the single "lead agency" for the preparation of the EIS.*

a. Findings

- (1) When more than one agency sponsors a project, there exists a question as to which agency's rules to observe regarding EIS preparation. If the BLM should sponsor an action along with another agency which is likely to urge preparation of a statement, conflict may result when the agencies discuss the preparation of the EIS. The problem is amplified considering that the BLM has designed its EAR/EIS process so that few EIS's result.

Criterion 4: Agency staff includes the representation of the relevant disciplines necessary to prepare the EIS and the employment of the staff in an interdisciplinary form.**

a. Findings

- (1) BLM personnel are deficient in specific disciplines and are not fully employed in an interdisciplinary form.
- (2) Personnel at the District have backgrounds specific to a resource. They possess a weak background in economics, sociology and archaeology. Additionally their ability to perceive ecological interrelationships could be heightened.
- (2) Staff encounters difficulty assessing the secondary impacts from a quantitative, qualitative and specific standpoint.

*CEQ Guidelines, part 1500.7 (b)

**CEQ Guidelines, Part 1500.8 (c)

Criterion 5: Provisions are to exist in the EIS process to encourage public participation at the earliest possible time and to facilitate inclusion of public comment.*

a. Findings

- (1) The Washington Office of the BLM asserts that public hearings are discretionary at the EAR and EIS level. EAR procedures call for an assessment of public intensity to determine the degree of controversy. The difference between an assessment of public intensity and formal public hearings is uncertain. EIS procedures state that public hearings are discretionary. As few statements have been written, there have been few instances when this requirement has been operationalized.
- (2) Districts and State Offices have found it politically beneficial to include public input; nevertheless, public input at the EAR level is not required.
- (3) While public input is included in the EIS, it is difficult to determine how the public comments have been reflected in the text of the EIS.

Criterion 6: Agency review of outside agency's statements emphasizes the assessment of the environmental impacts of the proposed actions and/or new alternatives that would avoid or minimize adverse environmental impacts.**

a. Findings

- (1) The Bureau is finding it increasingly difficult to adequately comment on outside agency's statements. The statements are

*Executive Order 11514, Sec. 2 (b).

**CEQ Guidelines, Part 1500.9 (e).

Criterion 2: Provisions are to exist in the EIS process to encourage public participation at the earliest possible time and to facilitate inclusion of public comment.*

a. Findings

(1) The Washington Office of the BLM asserts that public hearings are discretionary at the EAR and EIS level. EAR procedures call for an assessment of public interest to determine the degree of controversy. The difference between an assessment of public interest and formal public hearings is uncertain. EIS procedures state that public hearings are discretionary. A few statements have been written, there have been few instances when this requirement has been operationalized.

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Criterion 3: Agency review of outside agency's statements emphasize the assessment of the environmental impacts of the proposed actions and/or new alternatives that would avoid or minimize adverse environmental impacts.**

a. Findings

(1) The Bureau is finding it increasingly difficult to adequately comment on outside agency's statements. The statements are

becoming ever thicker, more technical and complex, while BLM's manpower has not expanded. As the length of time for review is fixed, the Bureau finds it difficult to sufficiently review a technical document with inadequate staffing.

Criterion 7: The EIS should be written in a manner that is understandable to the public.*

a. Findings

- (1) While the BLM has generated few environmental statements, a review of some examples show the EIS to be a highly technical document. The technical aspects of the EIS is not peculiar to the BLM but universal. As a document to be comprehended by the public, the BLM EIS does not succeed.
- (2) The EAR possesses the same characteristics of the EIS but appears more disjointed as background information necessary to the understanding of the EAR is often cited in the URA and MFP.

Criterion 8: The proposed action is to be described as related to the existing and proposed land use plans, policies, and controls at the Federal, State, and local levels.**

a. Findings

- (1) The BLM works with local agencies to inform and gain acceptance from the governmental unit for its pending plans. Since the MFP is indicative of future actions, the BLM Districts attempt to insert into the MFP a consideration of local plans and goals. Recently, the BLM in its revision of Manual 1972

*CEQ Guidelines, Part 1500.8 (8) (b)

**CEQ Guidelines, Part 1500.8 (a) (2)

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has added to its EIS format a section relating the proposed action to Federal, State and Local Land use plans, policies and controls in accordance with CEQ guidelines.

Criterion 9: Identification of probable adverse environmental effects, which cannot be avoided. Positive and negative effects of the proposed action as well as primary and secondary effects to the national and international environments are to be included under the subject of probable impact. Inherent in secondary considerations are assessments of possible change in population patterns or growth upon the resource base and investment and demand for public services.*

a. Findings

- (1) The agency is able to address the primary adverse effects to the environment of a proposed action; however, the Bureau encounters some difficulty assessing secondary effects.

As the BLM states that the MFP is not an action document, the agency does not formally evaluate the environmental implications of the MFP

- (2) The Districts contend that manpower levels are inadequate and staff backgrounds are insufficient to thoroughly analyze secondary considerations.

Criterion 10: Generation of a reasonable range of alternatives to the proposed action to include the alternative of "no action." Analysis to be sufficiently detailed to reveal the agency's comparative evaluation of the environmental benefits, costs, and risks of the proposed action and each reasonable alternative.**

a. Findings

- (1) The Districts develop a number of alternatives, usually from two to four, and include the "no action" alternative.

*CEQ Guidelines, Part 1500.8 (a) (3) and (5).

**CEQ Guidelines, Part 1500.8 (a) (4).

has added to the EIS format a section relating the proposed action to Federal, State and Local Land use plans, policies and controls in accordance with CEQ guidelines.

Criterion 7: Identification of probable adverse environmental effects which cannot be avoided. Positive and negative effects of the proposed action as well as primary and secondary effects to the national and international environment are to be included under the subject of probable impact. Inherent in secondary considerations are assessments of possible change in population patterns or growth upon the resource base and investment and demand for public services.

a. Findings

(1) The agency is able to address the primary adverse effects to the environment of a proposed action; however, the Bureau encounters some difficulty assessing secondary effects.

As the EIS states that the MNP is not an action document, the agency does not formally evaluate the environmental implications of the MNP.

(2) The Districts contend that manpower levels are inadequate and staff backgrounds are insufficient to thoroughly analyze secondary considerations.

Criterion 10: Generation of a reasonable range of alternatives to the proposed action to include the alternative of "no action." Analysis to be sufficiently detailed to reveal the agency's comparative evaluation of the environmental benefits, costs, and risks of the proposed action and each reasonable alternative.

a. Findings

(1) The Districts develop a number of alternatives, usually from two to four, and include the "no action" alternative.

However, the rationale or basis for generating a number of alternatives remains unclear. It appears that field offices are not linking the process of generating alternatives with management objectives stated in MFP's or Program Activity Plans. This may explain why Districts experience difficulty determining a "reasonable range" of alternatives.

- (2) While the Districts generate alternatives in the EAR, they do not fully explain, in terms of environmental benefits, cost, and risk, the rejection of the alternatives in favor of the proposed action.
- (3) Some Districts question whether or not the generation of a number of alternatives is a realistic exercise. The Eugene District exemplifies this problem. With a checkerboard land management pattern, the District wonders how feasible is any alternative except timber management considering that the trees on the private land surrounding a public recreation area, for example, are likely to be cut. Additionally, there may be instances where the development of the resource is unrealistic such that no serious alternatives can be determined. The obvious case occurs when the resource, e.g. minerals, is non-existent or not indigenous to the planning unit. Thus, the ability to generate alternatives is dependent upon the capacity and existence of the resource.

Criterion 11: A discussion of the tradeoffs between short-term environmental gains at the expense of long-term losses or vice versa in terms of significant environmental impacts of the proposed action; an identification

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of the unavoidable impacts the extent to which the action irreversibly curtails the range and use of potential natural and cultural resources.*

a. Findings

- (1) These two categories represent the weakest areas in the EAR and EIS documents. The BLM is not totally culpable as the state of the art that would assess unavoidable impacts and short and long term gains and losses has not sufficiently advanced.

- (2) The Districts admit deficiencies in these areas and limitations of staff capacity to answer these requirements.

a. Findings

- (1) Rather than merge the features of NEPA into its planning system, the Bureau has chosen to add the required elements to its planning system.
- (2) The Bureau has added, rewritten or amended its objectives, management principles, planning procedures, and quarter land use guides primarily to incorporate concepts and policies contained in NEPA.
- (3) The Bureau does not consider MFP to be an action or a resource allocation decision but rather a framework to guide management decisions.
- (4) BLM policies, objectives and manuals provide field offices with generally adequate guidance concerning what to do, but relate

of the unavoidable impacts the extent to which the action irreversibly
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Findings

(1) These two categories represent the weakest areas in the
EIS and EIS documents. The EIS is not totally culpable as
the nature of the act that would cause unavoidable impacts
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ations of staff capacity to answer these requirements.

CHAPTER IV

RECOMMENDATIONS FOR THE BUREAU OF LAND MANAGEMENT

To fulfill the purposes of this report, recommendations have been prepared which address the findings and criteria aforementioned in the section titled "NEPA Integration." The criteria and a summary of each respective finding have been listed appropriately under the general categories of Policies, Plans and Programs, and EAR/EIS procedures. Those recommendations immediately follow which, based on the findings, enable compliance with the criterion.

A. POLICIES

Criterion 1: All agencies shall review their administrative regulations, policies, and procedures, including those relating to loans, grants, contracts, leases, licenses, or permits, in order to identify any deficiencies or inconsistencies therein which prohibit or limit full compliance with the purposes and provisions of the Act.

a. Findings

- (1) Rather than merge the features of NEPA into its planning system, the Bureau has chosen to add the required elements to its planning system.
- (2) The Bureau has added, rewritten or amended its objectives, management principles, planning assumptions, and district land use guides primarily to incorporate concepts and policies contained in NEPA.
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To fulfill the purposes of this report, recommendations have been prepared which address the findings and conclusions mentioned in the section titled "NEPA Integration." The criteria and a summary of each respective finding have been listed appropriately under the general categories of Policies, Plans and Programs, and BLM procedures. Those recommendations immediately follow which, based on the findings, enable compliance with the criterion.

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a. Findings

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- (4) BLM policies, objectives and manuals provide field office with generally adequate guidance concerning what to do, but relate

very little, if any, guidance concerning how to perform certain operational functions within the Planning System context.

- (5) The Management Action Plan/Multi-Year Program (MAP/MYP) currently is being developed to address an identified need for standardizing program objectives in output terms and to better coordinate and provide the missing link between plans and programs and between long and short term planning objectives.
- (6) The EAR is the decision document regarding the question of significance and subsequent preparation of the EIS.
- (7) The Bureau has imposed a highly centralized, top-down control system relative to the decision to prepare the environmental statement. Essentially, the "go" decision on statements remains vested in and controlled by the Secretary of Interior.
- (8) The Department of the Interior has lengthened the decision-making process for the EIS by the establishment of a cumbersome clearance/review/concurrence cycle.
- (9) To ease the agency caseload, the Bureau has prepared programmatic statements for the various resource activities by geographic area. The programmatic statement, however, is too broad to delineate the environmental impacts of a specific action and is inadequate to substitute for an EAR/EIS at the micro level.
- (10) The BLM planning system has been designed and developed for the existing manpower and qualifications of its personnel in the field.
- (11) To meet the demands of EAR and EIS preparation given present funding levels, BLM manpower has been shifted from field work to the preparation of EAR's and EIS's.

very little, if any, guidance concerning how to perform certain operational functions within the Planning System context.

(5) The Management Action Plan/Short-Term Program (MAP/MYP)

currently is being developed to address an identified need for standardizing program objectives in output terms and to better coordinate and provide the missing link between plans and programs and between long and short term planning objectives.

(6) The EIS is the decision document regarding the question of

significance and subsequent preparation of the EIS.

(7) The Bureau has imposed a highly centralized, top-down con-

trol system relative to the decision to prepare the environ-

mental statement. Essentially, the "go" decision on statements

remains vested in and controlled by the Secretary of Interior.

(8) The Department of the Interior has heightened the decision-

making process for the EIS by the establishment of a complex

and cumbersome review/concurrence cycle.

(9) To ease the agency caseload, the Bureau has prepared program-

matic statements for the various resource activities by geographic

to area. The programmatic statement, however, is too broad

to delineate the environmental impacts of a specific action and is

inadequate to substitute for an EIS at the micro level.

(10) The BLM planning system has been designed and developed for

the existing manpower and qualifications of its personnel in the

field.

(11) To meet the demands of EIS and EIS preparation given present

staffing levels, BLM manpower has been shifted from field work

to the preparation of EIS's and EIS's.

- (12) The Bureau's internal costs generated by NEPA do not distinguish between usual Bureau environmental activities and NEPA related work. Additionally, the Bureau's procedures at the Washington level to approve EIS preparation and later to review the draft EIS prior to submission to CEQ are time consuming and involve an associated cost in foregone labor.

b. Recommendations

- (1), (2) and (6) No recommendations.

- (3) The MFP is an action document and, as the key element of the planning system, should be accompanied by an EIS. Because the MFP is that document which generates future actions, its consequences will be realized during subsequent years. The MFP assigns quite specific uses to the land and, by this process, denies other resource use opportunities which the land could support. In this sense, the MFP is a commitment of resources which is characteristic of an action. Therefore, given the MFP's long range implications and specified land use allocations, an environmental impact statement should be prepared to account for its significance. The need for an EIS for the MFP is further substantiated by the BLM itself which recently issued a draft revision of BLM Manual Section 1608, which included the following statement:

"The Management Framework Plan covers all resources and support activities for a specific land area within a district. It establishes land use allocations, objectives, and provides a coordinating framework for succeeding levels of planning action. It provides a direct guide to many forms of management action and provides a basis for determining proper sequence of management actions."*

*BLM, Director's Office Instruction Memo No. 73-38 (September 24, 1973), Draft Manual Section 1608 - Management Framework Plans.

(12) The Bureau's internal costs generated by NEPA do not dis-
tinguish between usual Bureau environmental activities and
NEPA related work. Additionally, the Bureau's procedures
at the Washington level to approve EIS preparation and later
to review the draft EIS prior to submission to CHQ are time
consuming and involve an associated cost to Bureau labor.

B. Recommendations

(1) (a) and (b) No recommendations.

(2) The MFP is an action document and, as the key element
of the planning system, should be accompanied by an EIS.
Because the MFP is that document which generates future
actions, its consequences will be realized during subsequent
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draft revision of HLM Manual Section 1808, which included
the following statement:
"The Management Framework Plan covers all resources and
support activities for a specific land area within a district.
It establishes land use allocations, objectives, and provides
a coordinating framework for succeeding levels of planning
action. It provides a direct guide to many forms of manage-
ment action and provides a basis for determining proper
sequence of management actions."

- (4) As reflected in some case study findings, field offices have initiated their own procedures and methodologies in addressing problem areas in the existing Planning System. Since these problem areas are common in most field offices, the Bureau together with the field offices should expedite uniform revisions to the planning system and manuals before a situation arises in which field offices operate independently with varying procedures.
- (5) Since MAP-MYP is largely experimental and not operational Bureau-wide, the BLM should initiate specific guidance for field offices to program actions from plans. The present AWP process and procedures are not clearly defined in BLM Manuals and should be modified.
- (7) and (8) The decision to prepare the EIS should be delegated to the State Director rather than the Office of the Secretary of the Interior. The State Director already has been delegated the authority for program approval by Bureau Order 684. His responsibility should be expanded to include the final decision authority concerning the preparation of the EIS. The State Director has greater familiarity with the circumstances surrounding the proposed action than Bureau and Departmental officials in Washington, D.C. This recommended delegation of authority would reduce the cumbersome Washington - State Office - District Office review which currently is practiced.
- (9) The Bureau should discontinue preparation of Programmatic Statements which are intended to cover Bureau-wide resource

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(5) Since MAP-MYP is largely experimental and not operational Bureau-wide, the BLM should initiate specific guidance for field offices to program actions from plans. The present AWP process and procedures are not clearly defined in BLM Manuals and should be modified.

(7) and (8) The decision to prepare the EIS should be delegated to the State Director rather than the Office of the Secretary of the Interior. The State Director already has been delegated the authority for program approval by Bureau Order 524. His responsibility should be expanded to include the final decision authority concerning the preparation of the EIS. The State Director has greater familiarity with the circumstances surrounding the proposed action than Bureau and Departmental officials in Washington, D.C. This recommended delegation of authority would reduce the number sent to Washington - State Office - District Office review which currently is practiced.

(9) The Bureau should discontinue preparation of Programmatic Statements which are intended to cover Bureau-wide resource

and support program activities. Such statements have little, if any, value for decisionmaking processes and application in the field. The BLM should reduce the scope of its programmatic statements to the district or state levels.

For example, a BLM District might find it quite valuable to prepare a programmatic statement on grazing to cover all related action occurring within the District over a specified period of time.

(10) and (11) Requesting an increase in appropriations for more manpower is an obvious solution. However, before doing this, the Bureau should conduct a study to evaluate the allocation and utilization of its present manpower and then recommend deletions, additions and other modifications.

(12) A cost tracking system is required for NEPA-generated costs. Such a system would enable the Bureau to determine precisely its cost of operation and would aid the Bureau in the assessment and preparation of its budget, especially in areas covering environmental work. BLM costs may be viewed as comprising of planning costs, resource management costs, and NEPA generated EAR and EIS costs. As an alternative, the Bureau could redefine WJC 3806 to include only NEPA-generated costs, that is, EAR and EIS work and EIS hearings. Environmental analysis (not to be confused with the preparation and development of an EAR) would require either its own WJC or inclusion in appropriate planning WJC's for environmental analysis, EAR work, and EIS preparation and hearings.

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Criterion 2: CEQ Guidelines require the agencies to identify the types and classes of actions likely to require the statement and those actions likely not to require the statement.

(a) Findings

- (1) The Bureau has not yet determined the types and classes of actions which would require the EIS. The Bureau believes each action must be judged on its own merit, and efforts are futile which attempt to generalize and establish classes of actions which require the preparation of an EIS.

(b) Recommendations

- (1) The BLM should comply with the CEQ Guidelines and designate the classes of actions including the MFP for which an EIS is required.

B. PLANS AND PROGRAMS

Criterion 1: Identify and develop methods and procedures which will insure that presently unqualified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations. Initiate and utilize ecological information in the planning and development of resource-oriented projects.

(a) Findings

- (1) The Bureau has attempted compliance by the development of the Environmental Profile and the EAR/EIS process. The Environmental Profile collects environmental data and synthesizes the data to express ecological interrelationships.
- (2) In the preparation of the EAR, the role of the information system, URA, is unclear. While the URA is the data baseline upon which analyses are founded, the BLM finds that the more complex the action, the information requisite to the analysis becomes inadequate.

Criterion 3: CMO Guidelines require the agencies to identify the types and classes of actions likely to require the statement and those actions likely not to require the statement.

(a) Findings

(1) The Bureau has not yet determined the types and classes of actions which would require the EIS. The Bureau believes each action must be judged on its own merits, and efforts are under way to attempt to generate an established class of actions which require the preparation of an EIS.

(b) Recommendations

(1) The BLM should comply with the CMO Guidelines and designate the classes of actions including the MRP for which an EIS is required.

B. PLANS AND PROGRAMS

Criterion 1: Identify and develop methods and procedures which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decision-making along with economic and technical considerations. Initial and future ecological information in the planning and development of resource-oriented projects.

(a) Findings

(1) The Bureau has attempted compliance by the development of the Environmental Profile and the EAR/EIS process. The Environmental Profile collects environmental data and synthesizes the data to express ecological interrelationships. (2) In the preparation of the EAR, the role of the information system, URA, is unclear. While the URA is the data base upon which analyses are based, the BLM finds that the more complex the action, the information requisite to the analysis becomes inadequate.

(b) Recommendations

- (1) The Bureau should re-examine the methodology presently being utilized in the Environmental Profile. The overlay technique for determining environmental quality classification of an area is highly suspect.* Other techniques and methodologies should be examined and developed by the Bureau. The Landscape Values section is of little value and should be deleted from the Profile.
- (2) Field offices should develop a sufficient data bank that will allow development and completion of URA, MFP and PAP documents as well as EAR and EIS documents.

Criterion 2: Utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man's environment.

a. Findings

- (1) The collection of data is not in accordance with a true interdisciplinary approach. While data general to the planning unit are gathered, URA Step 4 specifies the "tunnel vision" approach, in which the assembled data specific to an individual resource activity are analyzed for resource capabilities and opportunities independent of the other resource activities.
- (2) The interdisciplinary approach enters the BLM planning system in MFP Step 2 in the development of multiple-use recommendations for the planning unit. Each resource specialist has developed the best possible plan for his resource, and now the seven resource specialists empanel, each advocating his plan.

*See Carson City Case Study.

- (1) The Bureau should re-examine the methodology presently being utilized in the Environmental Profile. The overlay technique for determining environmental quality classification of an area is highly suspect. Other techniques and methodologies should be examined and developed by the Bureau. The Landscape Values section is of little value and should be deleted from the Profile.
- (2) Field offices should develop a sufficient data bank that will allow development and completion of LRA, MFP, and PAP documents as well as EIR and EIS documents.

Criterion 2: Utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision-making which may have an impact on man's environment.

a. Findings

- (1) The collection of data is not in accordance with a true interdisciplinary approach. While data general to the planning unit are gathered, LRA Step 4 specifies the "factual vision" approach in which the assembled data specific to an individual resource activity are analyzed for resource capabilities and opportunities independent of the other resource activities.
- (2) The interdisciplinary approach enters the EIM planning system in MFP Step 2 in the development of multiple-use recommendations for the planning unit. Each resource specialist has developed the best possible plan for his resource, and now the seven resource specialists compare, each advocating his plan.

b. Recommendations

- (1) and (2) The interdisciplinary function should begin in URA

Step 3 (Analysis and Recordation of the Present Situation).

Resource specialists should be encouraged to conduct field work and inventories together. This procedure would facilitate increased group interaction and an improved understanding not only of information and data for the individual resource activities but also the interrelationships which may exist among these resource activities. Additionally, the interdisciplinary approach can serve as a check to insure that the requisite data have been collected for each resource. This initial team effort in URA Step 3 may serve to facilitate conflict analysis and resolution in MFP Step 2 by providing each resource specialist with some knowledge of the other resource activities and existing interrelationships.

Criterion 3: Develop procedures to ensure the fullest practicable provision of timely public information and understanding of Federal plans and programs with environmental impact in order to obtain the views of interested parties.

a. Findings

- (1) While BLM manuals for the URA and MFP indicate that public participation is required, they do not specifically identify where public participation should be sought and inputted.
- (2) The EAR does not require formal public input, but many districts have found it politically wise to include some level of public feedback depending on the dimension and scope of the proposed action. The EIS may require formal public hearings according to the BLM Manuals.

(1) and (2) - The interdisciplinary function should begin in URA

Step 3 (Analysis and Resolution of the Present Situation).

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and inventories together. This procedure would facilitate in-

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collected for each resource. This initial team effort in URA

Step 3 may serve to facilitate conflict analysis and resolution

in MFP Step 3 by providing each resource specialist with some

knowledge of the other resource activities and existing inter-

relationships.

Criterion 3: Develop procedures to ensure the fullest practicable pro-
vision of timely public information and understanding of Federal plans
and programs with environmental impact in order to obtain the views
of interested parties.

a. Findings

(1) While RLM manuals for the URA and MFP indicate that public

participation is required, they do not specifically identify where

public participation should be sought and inputted.

(2) The EAR does not require formal public input, but many districts

have found it politically wise to include some level of public feed-

back depending on the dimension and scope of the proposed action.

The FRS may require formal public hearings according to the

RLM Manuals.

b. Recommendations

(1) The BLM should prescribe specifically public input at the following stages of the Planning System:

(a) URA Step 3: Field offices should seek public input for data and pertinent information when analyzing and inventorying the present situation.

(b) URA Step 4: Each resource specialist should have the freedom to consult both public and private sources in the development of his resource.

(c) MFP Step 2: The BLM should prescribe problem identification and issue analysis procedures for field offices. After conflicts and issues have been identified, the district should submit these to public review for comments and feedback.

(d) MFP Step 3: The District should develop a number of alternative land use/resource management plans for public review before the District Manager makes his decision.

(2) Public input, review and hearings should remain discretionary for EAR documents, but mandatory for environmental statements.

Criterion 4: Develop a range of alternatives to the proposed plan, which involves unresolved conflicts concerning alternative uses of available resources.

a. Findings

(1) At URA Step 4, the resource specialist develops a single development plan for his particular resource given no economic, political, and social constraints and no considerations for other resources existing in the planning unit.

(2) During the MFP process, the generation of alternatives may occur at MFP Step 2. For most Districts, the MFP does not

(1) The HLM should prescribe specifically public input at the following stages of the Planning System:

(a) URA Step 3: Field offices should seek public input for data and pertinent information when analyzing and inventorying the present situation.

(b) URA Step 4: Each resource specialist should have the freedom to consult both public and private sources in the development of his resources.

(c) MRP Step 1: The HLM should prescribe problem identification and basic analysis procedures for field offices. After consultation and review have been identified, the district should submit these to public review for comments and feedback.

(d) MRP Step 3: The District should develop a number of alternative land use management plans for public review before the District Manager makes his decision.

(2) Public input, review and hearings should remain discretionary for EAB documents, but mandatory for environmental statements.

Criterion 4: Develop a range of alternatives to the proposed plan, which involves unresolved conflicts concerning alternative uses of available resources.

a. Findings

(1) At URA Step 4, the resource specialist develops a single development plan for his particular resource given no economic, political, and social constraints and no considerations for other resources existing in the planning unit.

(2) During the MRP process, the generation of alternatives may occur at MRP Step 3. For most Districts, the MRP does not

generate any land use alternatives other than the one which is approved by the District Manager.

b. Recommendations

- (1) In URA Step 4, resource specialists should be encouraged to develop more than one technically feasible, optimal, single resource use plan for scrutiny and review by the area manager.
- (2) The Bureau should generate and document several land use alternatives during MFP Step 2. At present, resolution of conflicts is accomplished by employment of the adversary concept to produce the MFP, the land use plan. Resolution could be accomplished equally by the generation of a number of land use plans. Each alternative would undergo environmental analysis and submission to public scrutiny. The District Manager would then select that alternative which fulfills Bureau objectives, minimizes severity of environmental impact and demonstrates favorable public response. NEPA explicitly requires the generation of alternatives and the BLM MFP process violates this consideration. The BLM's adversary concept generates one land use alternative; without extreme difficulty this methodology can be developed to create several land use alternatives.

Criterion 5: Monitor, evaluate, and control on a continuing basis their agencies' activities so as to protect and enhance the quality of the environment. Such activities shall include those directed to controlling pollution and enhancing the environment and those designed to accomplish other program objectives which may affect the quality of the environment.

a. Findings

- (1) The Bureau has not developed a system that monitors the overall environmental effects of implemented actions. Environmental inspection is informal and unsubstantiated.

generate any land use alternatives other than the one which is

approved by the District Manager.

b. Recommendations

- (1) In URA Step 4, resource specialists should be encouraged to develop more than one technically feasible, optimal, single resource use plan for scrutiny and review by the area manager.
- (2) The Bureau should generate and document several land use alternatives during MFP Step 3. At present, resolution of conflicts is accomplished by assignment of the adversary concept to produce the MFP, the land use plan. Resolution could be accomplished equally by the generation of a number of land use plans. Each alternative would undergo environmental analysis and submission to public scrutiny. The District Manager would then select the alternative which fulfills Bureau objectives, minimizes severity of environmental impact and demonstrates favorable public response. NEPA explicitly requires the generation of alternatives and the BLM MFP process violates this consideration. The BLM's adversary concept generates one land use alternative without explicitly integrating methodology can be developed to create several land use alternatives.

Criterion 5: Monitor, evaluate, and control on a continuing basis land resources activities so as to protect and enhance the quality of the environment. Such activities shall include those directed to controlling pollution and enhancing the environment and those designed to accomplish other program objectives which may affect the quality of the environment.

a. Findings

- (1) The Bureau has not developed a system that monitors the overall environmental effects of implemented actions. Environmental inspection is informal and unsubstantiated.

- (2) The Bureau holds formal reviews at periodic intervals of Bureau activities and operations at the District level.
- (3) While the District Manager informally integrates the MFP's prepared for the District's planning unit, there exists little coordination between districts.

b. Recommendations

- (1) and (2) The BLM should develop a monitoring system that covers past and on-going actions, which are analyzed in EAR or EIS documents.
- (3) The District should develop a District MFP to permit a more formal coordination of the MFP's generated by its planning units. The state office should aggregate the land use plans of this District within its jurisdiction into a state MFP. This procedure enables the state to examine and mitigate the conflicts which occur at the macro level. The aggregation of state MFP's should constitute a Bureau-wide land use plan which would be expressive of the Bureau's responsibilities, objectives and principles.

Criterion 6: Engage in exchange of data and research and cooperate with agencies of other governments to foster the purposes of the Act.

a. Findings

- (1) The Bureau works with all levels of governments to obtain the data it otherwise would have researched independently. The agency does not appear reluctant in this regard.

b. Recommendations

- (1) None.

(2) The Bureau holds formal reviews at periodic intervals of Bureau activities and operations at the District level.

(3) While the District Manager internally integrates the MFP's prepared for the District's planning unit, there exists little coordination between districts.

b. Recommendations

(1) and (2) The BLM should develop a monitoring system that covers past and on-going actions, which are analyzed in EAH or EIS documents.

(3) The District should develop a District MFP to permit a more formal coordination of the MFP's generated by its planning units. The state office should aggregate the land use plans of this District within its jurisdiction into a state MFP. This procedure enables the state to examine and mitigate the conflicts which occur at the macro level. The aggregation of state MFP's should constitute a forest-land use plan which would be representative of the Bureau's responsibilities, objectives and principles.

Criterion 5: Exchange in exchange of data and research and cooperate with agencies of other governments to foster the purposes of the Act.

a. Findings

(1) The Bureau works with all levels of government to obtain the data it otherwise would have researched independently. The agency does not appear reluctant in this regard.

b. Recommendations

(1) None.

C. EAR/EIS PROCESS

Criterion 1: Agencies are required to make an initial assessment of the environmental impacts for the proposed action. This is the decision document and/or level for the determination of significant effects and recommendation to prepare the EIS.

a. Findings

- (1) The BLM response has been the EAR, which provides the analysis to determine significance. In compliance with NEPA, the EAR is the go/no go decision for the EIS.
- (2) The Bureau has developed guidance to permit the District Office to write an EAR at a level of analytical detail commensurate with the type of proposed action and nature of environment in which the action takes place.
- (3) For the EAR, impacts residual to the environmental analysis and the degree of controversy define the decision to prepare the environmental statement. As the EAR process has recommended the preparation of few statements, the methodology of the EAR is a source of concern.
- (4) Procedures do not require EAR public review and interagency comments.
- (5) BLM Manual 1791 Environmental Analysis specifically prescribes that cost benefit justification is notto in order in the analysis of alternatives included in an EAR.

b. Recommendations

- (1) and (2) No recommendations.
- (3) As the EAR process has produced few recommendations calling for the preparation of the EIS, the analytical methodology inherent in the EAR process in a source of concern. There are four potential weaknesses in the EAR system. The BLM personnel

C. EAR EIS PROCESS

Criterion 1: Agencies are required to make an initial assessment of the environmental impacts for the proposed action. This is the decision document and/or level for the determination of significant effects and recommendation to prepare the EIS.

a. Findings

- (1) The EIS response has been the EAR, which provides the analysis to determine significance. In compliance with NEPA, the EAR is the go/no go decision for the EIS.
- (2) The Bureau has developed guidance to permit the District Office to write an EAR at a level of analytical detail commensurate with the type of proposed action and nature of environment in which the action takes place.
- (3) For the EAR, impacts related to the environmental analysis and the degree of controversy define the decision to prepare the environmental statement. As the EAR process has recommended the preparation of few statements, the methodology of the EAR is a source of concern.
- (4) Procedures do not require EAR public review and interagency comments.
- (5) BLM Manual 1781 Environmental Analysis specifically prescribes that cost benefit justification is not to be used in the analysis of alternatives included in an EAR.

b. Recommendations

- (1) and (2) No recommendations.
- (3) As the EAR process has produced few recommendations calling for the preparation of the EIS, the analytical methodology inherent in the EAR process is a source of concern. There are four potential weaknesses in the EAR system. The BLM personnel

may not be assessing adequately the adverse impacts of the proposed project. The mitigating measures developed to reduce the adverse impacts may not be effective as BLM personnel believe and demand further scrutiny. The net residuals, the application of the mitigating measures to the anticipated impacts, may be insufficiently evaluated given the inadequate examination of the potential adverse effects and the unsubstantiated employment of mitigating measures. Finally, the analysis of the residual impacts for significance in order to proceed to preparation of the EIS may not be addressing the proper questions. The structure of the EAR methodology seems proper. The components of the methodology, however, are weak which offers an explanation as to why so few statements have been recommended. The components of the EAR analysis should be enhanced and the inadequacies resolved.

- (4) Depending on the type of action and level of controversy, the preparation of an EAR should include public input and review.
- (5) Rather than excluding cost-benefit analysis in the EAR, the Bureau should encourage cost-benefit analysis wherever appropriate and applicable.

Criterion 2: The EIS serves as a means of assessing the environmental impact of proposed actions rather than as a justification for the implementation of the proposed action.

a. Findings

- (1) While the EAR does assess the environmental impact of proposed actions, there is some concern that the EAR justifies the proposed action.

may not be assessing adequately the adverse impacts of the proposed project. The mitigating measures developed to reduce the adverse impacts may not be effective as BLM personnel believe and demand further scrutiny. The net residuals, the application of the mitigating measures to the anticipated impacts, may be insufficiently evaluated given the inadequate examination of the potential adverse effects and the unquantified employment of mitigating measures. Finally, the analysis of the residual impacts for significance in order to proceed to preparation of the EIS may not be addressing the proper questions. The structure of the EIR methodology seems proper. The components of the methodology, however, are weak which offers an explanation as to why so few statements have been recommended. The components of the EIR analysis should be expanded and the inadequacies resolved.

- (4) Depending on the type of action and level of controversy, the preparation of an EIR should include public input and review.
- (5) Rather than excluding cost-benefit analysis in the EIR, the Bureau should encourage cost-benefit analysis wherever appropriate and applicable.

Criterion 3: The EIS serves as a means of assessing the environmental impact of proposed actions rather than as a justification for the implementation of the proposed action.

a. Findings

- (1) While the EIR does assess the environmental impact of proposed actions, there is some concern that the EIR justifies the proposed action.

- (2) The BLM EIS content requirements are in accordance with CEQ Guidelines. It has been difficult to judge the EIS's of the BLM as a mechanism to assess environmental impact since few statements have been prepared.

b. Recommendations

- (1) Districts should and have expressed the desire to utilize a staff independent to the URA/MFP/PAP for EAR/EIS preparation. Adoption of this procedure would ensure greater objectivity and lessen the possibility of program justification.
- (2) The BLM should evaluate the EAR procedures to see whether or not that process inhibits the recommendation to prepare the EIS. (Refer to EAR/EIS Process, Criterion 1, Recommendation 3.)

Criterion 3: Where more than one agency sponsors an action, the involved agencies should consider the preparation of a joint statement or designate one of the participant agencies as the single "Lead agency" for the preparation of the EIS.

a. Findings

- (1) If the BLM should sponsor an action along with another agency which is likely to urge preparation of a statement, conflict may result when the agencies discuss the preparation of the EIS. The problem is amplified considering that the BLM has designed its EAR/EIS process so that few EIS's result.

b. Recommendations

- (1) With regards to the lead agency concept, several alternative means presently exist to comply with NEPA:
- a. Each agency prepares a statement on its specific part of action.
- b. The agencies involved might issue a jointly prepared statement.

(2) The BLM EIS content requirements are in accordance with CEQ Guidelines. It has been difficult to judge the EIS's of the BLM as a mechanism to assess environmental impact since few state-
ments have been prepared.

b. Recommendations

(1) Districts should and have expressed the desire to utilize a staff independent to the URA/MRP/EAP for EAB/EIS preparation. Adoption of this procedure would ensure greater objectivity and lessen the possibility of program justification.

(2) The BLM should evaluate the EAB procedures to see whether or not that process inhibits the recommendation to prepare the

EIS. (Refer to EAB/EIS Process, Criterion 1, Recommendation 2.)

Criterion 2: Where more than one agency sponsors an action, the involved agencies should consider the preparation of a joint statement or designate one of the participating agencies as the single "lead agency" for the preparation of the EIS.

a. Findings

(1) If the BLM should sponsor an action along with another agency which is likely to make preparation of a statement, conflict may result when the agencies discuss the preparation of the EIS. The problem is amplified considering that the BLM has designed the EAB/EIS process so that few EIS's result.

b. Recommendations

(1) With regards to the lead agency concept, several alternatives means presently exist to comply with NEPA:

a. Each agency prepares a statement on its specific part of action.

b. The agencies involved might issue a jointly prepared statement.

- c. One agency might be designated to take the lead for all the agencies involved.

The problem with the first alternative is that agency intuition and coordination is hindered as each agency concentrates on its role. The last alternative stresses one agency's input and bias over those agencies which are involved but not preparing the statement.

The second alternative would seem to be more favorable. It compels each agency to contribute to the findings of the statement and provides for the maximum cooperation and inter-agency coordination. To accomplish this alternative, a task force would be appointed consisting of one member from each of the participant agencies. To the extent possible each task force member would be required to provide appropriate information and input from his respective agency. Conflicting rules and guidelines between or among the agencies would have to be resolved by the agencies before formation of the task force. As NEPA was designed to to promote improved and greater inter-agency coordination, such a procedure would appear favorable. As NEPA was developed to improve decision-making specifically regarding environmental information and describe impacts to the environment arising from proposed federal projects, only the task force approach could best fulfill the law's intention. Each agency brings a different perspective as well as input to the statement. The collective approach, although cumbersome within the bureaucratic framework, would seem the best manner by which environmental conflicts can be raised and, hopefully, resolved.

c. One agency might be designated to take the lead for all the agencies involved.

The problem with the first alternative is that agency initiation and coordination is hindered as each agency concentrates on its role. The last alternative stresses one agency's input and bias over those agencies which are involved but not preparing the statement.

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Criterion 4: Agency staff includes the representation of the relevant disciplines necessary to prepare the EIS and the employment of the staff in an interdisciplinary form.

a. Findings

- (1) BLM personnel are deficient in specific disciplines and are not fully employed in an interdisciplinary form. Additionally, their ability to perceive ecological interrelationships could be heightened.
- (2) Staff encounters difficulty assessing the secondary impacts from a quantitative, qualitative and specific standpoint.

b. Recommendations

- (1) The BLM should reorient its hiring policy to employ personnel with stronger planning and environmental backgrounds.
- (2) The Bureau should investigate and develop methodologies and techniques to aid field office staffs.

Criterion 5: Provisions are to exist in the EIS process to encourage public participation at the earliest possible time and to facilitate inclusion or public comment.

a. Findings

- (1) The Washington Office of the BLM asserts that public hearings are discretionary at the EAR and EIS level.
- (2) Districts and State Offices have found it politically beneficial to include public input; nevertheless, public input at the EAR level is not required.
- (3) While public input is included in the EIS, it is difficult to determine how the public comments have been reflected in the text of the EIS.

b. Recommendations

- (1) The EAR should include public input and review, depending on

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b. Recommendations

- (1) The EAR should include public input and review, depending on

the type of action, environmental impacts involved and the level of controversy. Public participation should be mandatory at the EIS level.

(2) No recommendation.

(3) Public input should be incorporated and identified in the text of the EIS in addition to inclusion as an appendix item.

Criterion 6: Agency review of outside agency's statements emphasizes the assessment of the environmental impacts of the proposed actions and/or new alternatives that would avoid or minimize adverse environmental impacts.

a. Findings

(1) The Bureau is finding it increasingly difficult to adequately comment on outside agency's statements as the statements are becoming ever thicker, more technical and complex, while BLM's manpower has not expanded and as the length of time for review is fixed.

b. Recommendations

(1) As the BLM is experiencing some difficulty reviewing outside agency EIS's, the agency should document and submit its problems to the CEQ. If NEPA is to be seriously implemented, problems such as this one should be exposed to permit the development of solutions and thus fulfill the spirit of the Act. Additionally, the EIS in general is burdened by excessive research which is descriptive in character and does not address the issues and the analysis specific to the impacts of the action. If the descriptive literature could be reduced and more analyses clearly developed, the EIS would be a less excessive document to review.

Criterion 7: The EIS should be written in a manner that is understandable to the public. Decisions must be clear and logically developed.

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(2) As the BLM is experiencing some difficulty reviewing outside agency EIS's, the agency should document and submit its problems to the CEO. If NEPA is to be seriously implemented, problems such as this one should be exposed to permit the development of solutions and thus fulfill the spirit of the Act. Additionally, the EIS in general is burdened by excessive research which is descriptive in character and does not address the issues and the analysis specific to the impacts of the action. If the descriptive literature could be reduced and more analysis clearly developed, the EIS would be a less excessive document to review.

Criterion 7: The EIS should be written in a manner that is understandable to the public. Decisions must be clear and logically developed.

a. Findings

- (1) While the BLM has generated few environmental statements, a review of some examples show the EIS to be a highly technical document.

As a document to be comprehended by the public, the BLM EIS does not succeed.

- (2) The EAR possesses the same characteristics of the EIS but appears more disjointed as background information necessary to the understanding of the EAR is often cited in the URA and MFP

b. Recommendations

- (1) The Bureau should prepare models of the EIS that would translate to the District personnel the directions, analysis and level of detail which complies with NEPA. These models would be instructional to the BLM personnel and eliminate confusion concerning content.

- (2) Since the EAR also serves as the Bureau's negative declaration, it should be written to provide the public with a logical and clear understanding of the action, environmental impacts, alternatives and other considerations involved.

Criterion 8: The proposed action is to be described as related to the existing and proposed land use plans, policies, and controls at the Federal, State and local levels.

a. Findings

- (1) The BLM works with local agencies to inform and gain acceptance from the governmental unit for its pending plans which includes the MFP. The BLM has revised the EIS format to include a section relating the proposed action to Federal, State and local land use plans, policies and controls.

a. Findings

(1) While the BLM has generated few environmental statements, a review of some examples show the EIS to be a highly technical document. As a document to be comprehended by the public, the BLM EIS does not succeed.

(2) The EIR possesses the same characteristics of the EIS but appears more disjointed as background information necessary to the understanding of the EIR is often cited in the URA and MIP.

b. Recommendations

(1) The Bureau should prepare models of the EIS that would translate to the District personnel the direction, analysis and level of detail which complies with NEPA. These models would be instructional to the BLM personnel and eliminate confusion concerning content.

(2) Since the EIR also serves as the Bureau's negative declaration, it should be written to provide the public with a logical and clear understanding of the action, environmental impacts, alternatives and other considerations involved.

Criterion 3: The proposed action is to be described as related to the existing and proposed land use plans, policies, and controls at the Federal, State and local levels.

a. Findings

(1) The BLM works with local agencies to inform and gain acceptance from the governmental unit for its pending plans which include the MIP. The BLM has revised the EIS format to include a section relating the proposed action to Federal, State and local land use plans, policies and controls.

b. Recommendations

- (1) No recommendation.

Criterion 9: Identification of probable adverse environmental effects, which cannot be avoided. Positive and negative effects of the proposed action as well as primary and secondary effects to the national and international environments are to be included under the subject of probable impact. Inherent in secondary considerations are assessments of possible change in population patterns or growth upon the resource base and investment and demand for public services.

a. Findings

- (1) The agency is able to address the primary effects to the environment of a proposed action; however, the Bureau encounters some difficulty assessing secondary effects. As the BLM states that the MFP is not an action document, the agency does not formally evaluate the environmental implications of the MFP.
- (2) The Districts contend that manpower levels are inadequate and staff backgrounds are insufficient to thoroughly analyze secondary considerations.

b. Recommendations

- (1) and (2) Bureau should investigate and develop predictive and evaluative techniques to address this problem area.

Criterion 10: Generation of a reasonable range of alternatives to the proposed action to include the alternative of "no action." Analysis to be sufficiently detailed to reveal the agency's comparative evaluation of the environmental benefits, costs, and risks of the proposed action and each reasonable alternative.

a. Findings

- (1) The Districts develop a number of alternatives, usually from two to four, and include the "no action" alternative. There is some question raised by the Districts concerning what is a "reasonable range" of alternatives. The process of generating a "reasonable range" of alternatives is not linked with management objectives in MFP's or Program Activity Plans.

b. Recommendations

(i) No recommendation.

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- (2) While the Districts generate alternatives in the EAR, they do not fully explain, in terms of environmental benefits, cost, and risk, the rejection of the alternatives in favor of the proposed action.
- (3) Some Districts question whether or not the generation of a number of alternatives is a realistic exercise. The ability to generate alternatives is dependent upon the capacity and existence of the resource and the ownership pattern of the land.

b. Recommendations

- (1) The BLM should develop a set of guidelines that would prescribe methods and procedures necessary to the generation of a reasonable range of alternatives. The range of alternatives should be a function of management objectives stated in MFP's or Program Activity Plans and appropriate to the level of intensity of the action. These guidelines could include the requirement that the EAR and EIS explain why the generated alternatives constitute a "reasonable" set.
- (2) The BLM not only should develop alternatives but cost-benefit analysis and other analytical methodologies to explain why alternatives are favorable or not.
- (3) If the generation of alternatives is not pragmatic, then the reasons why alternatives cannot be realistically developed must be detailed and fully explained.

Criterion 11: A discussion of the tradeoffs between short-term environmental gains at the expense of long-term losses or vice versa in terms of significant environmental impacts of the proposed action; an identification of the unavoidable impacts the extent to which the action irreversibly curtails the range and use of potential natural and cultural resources.

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(3) If the generation of alternatives is not pragmatic, then the reasons why alternatives cannot be realistically developed must be detailed and fully explained.

Criterion II: A discussion of the tradeoffs between short-term environmental gains at the expense of long-term losses or vice versa in terms of significant environmental impacts of the proposed action; an identification of the unavoidable impacts to which the action inevitably entails the range and use of potential natural and cultural resources.

a. Findings

- (1) These two categories represent the weakest areas in the EAR and EIS documents. The BLM is not totally culpable as the state of the art that would assess unavoidable impacts and short- and long-term gains and losses has not sufficiently advanced.
- (2) The Districts admit deficiencies in these areas and limitations of staff capacity to answer these requirements.

b. Recommendations

- (1) and (2) The Bureau should investigate and develop techniques to address this problem area. While it is difficult to forecast long-term environmental losses and gains, the Bureau should institute continuous monitoring of the environment to establish a historical and constantly updated data base.

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CHAPTER V

FOREST SERVICE

A. BACKGROUND

1. History

The Forest Service was created by the Transfer Act of 1905 (33 Stat. 628; 16 U.S.C. 472). This Act transferred the Federal Forest Reserves, and the responsibility for their management to the Department of Agriculture from the Department of the Interior. The reserves (13 million acres) were established from the public domain under the authority of the Creative Act of 1891 (26 Stat. 1103; 16 U.S.C. 471). No provision for administration of these reserves was made until the Organic Administration Act of 1897, which provided for the protection, management and development of the reserves. The Act of March 4, 1907, renamed the forest reserves National Forests. The Government was allowed to purchase and exchange land for National Forests for timber production and regulation of the flow of navigable streams by the Weeks Law of 1911 (36 Stat. 961-963; 16 U.S.C. 480). This Act also made provisions for a federal-state cooperation in fire protection program. The Multiple Use-Sustained Yield Act of 1960 (74 Stat. 215; 16 U.S.C. 528-531) also governs the protection and development of the National Forests, and reconfirmed the Forest Service policy to administer the National Forests, particularly for outdoor recreation, range, timber, watershed, and fish purposes.

The Forest Service now manages over 187 million acres contained in 155 National Forests, 19 National Grasslands and 19 land utilization projects.

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The Forest Service now manages over 187 million acres contained in 155 National Forests, 19 National Grasslands and 19 land utilization projects.

2. Organization

a. General

The Forest Service, in order to manage its lands which are geographically diffused and physically heterogeneous, has developed an organizational structure that, in spite of its complexity, provides a clear-cut channel for the transmission of policy, instructions, recommendations, and accountability. Responsibility and decision-making is decentralized according to kinds of work.

The basic form of this organizational structure is a line and staff combination. Responsibility and decision-making is delegated to the Forest Service line officers, who are aided by staff officers who advise, recommend, observe, and report. The Forest Service line organization is shown in Exhibit A.

b. Areas

The line organization coincides with territorial jurisdiction. Since the Forest Service is a multiple-use land management agency, a single officer is responsible for administering an area. The utilization of one resource affects the management of other resources; thus, conflict is minimized by one person controlling all activities. This line of authority is the same for each of three Forest Service areas of primary responsibility.

National Forest System - The line of authority for administering the National Forests runs from the Chief to the regional forester to the forest supervisor to the district ranger. Responsibility for results runs from the district ranger to the Chief through the same links.

State and Private Forestry Cooperation - The line of responsibility and authority for State and private forestry work is shorter. In the 17

and authority for state and private forestry work is provided. In the 13 State and Private Forestry Corporation - The use of responsibility

from the district level to the State level, the same thing. Forest activities in the district level. Responsibility for state National Forestry Law from the State to the district level, to the National Forestry System - The use of authority for administering the

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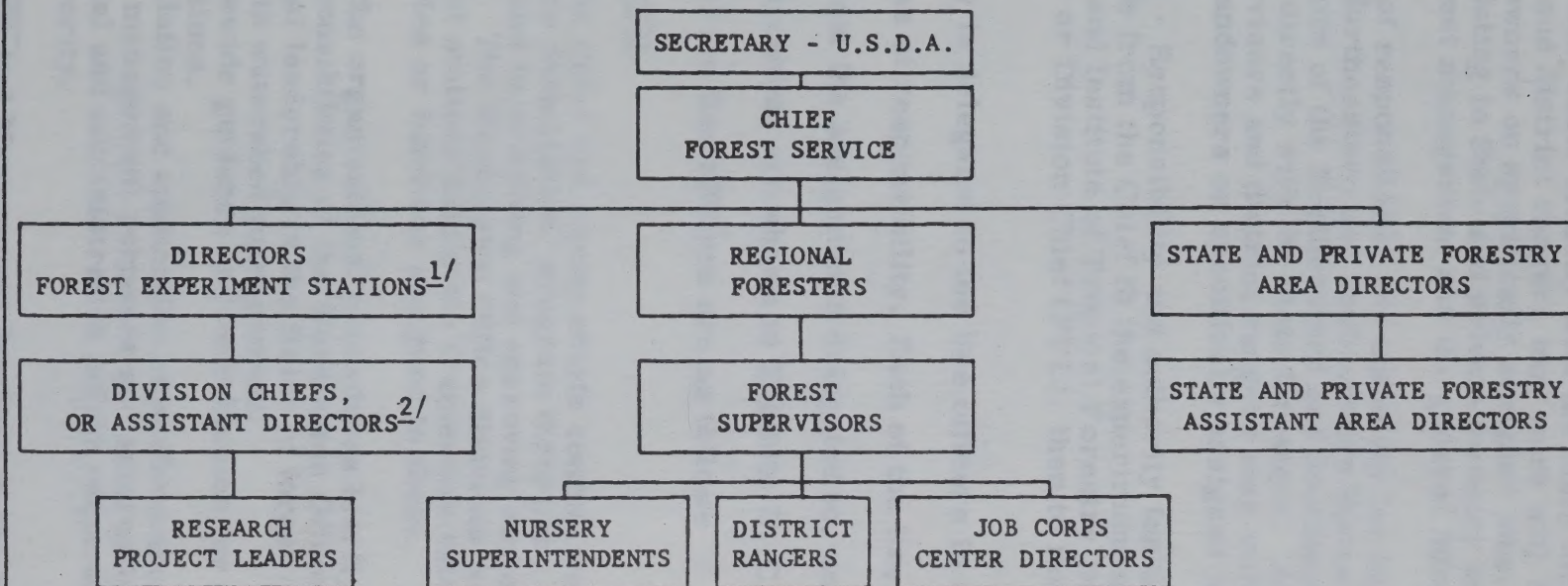
management, control, and control. The Forest Service has organization Service the officers, who are elected by state officers who manage, control, responsibility and decision-making is delegated to the Forest. The main form of this organizational structure is a line and staff combination according to kinds of work.

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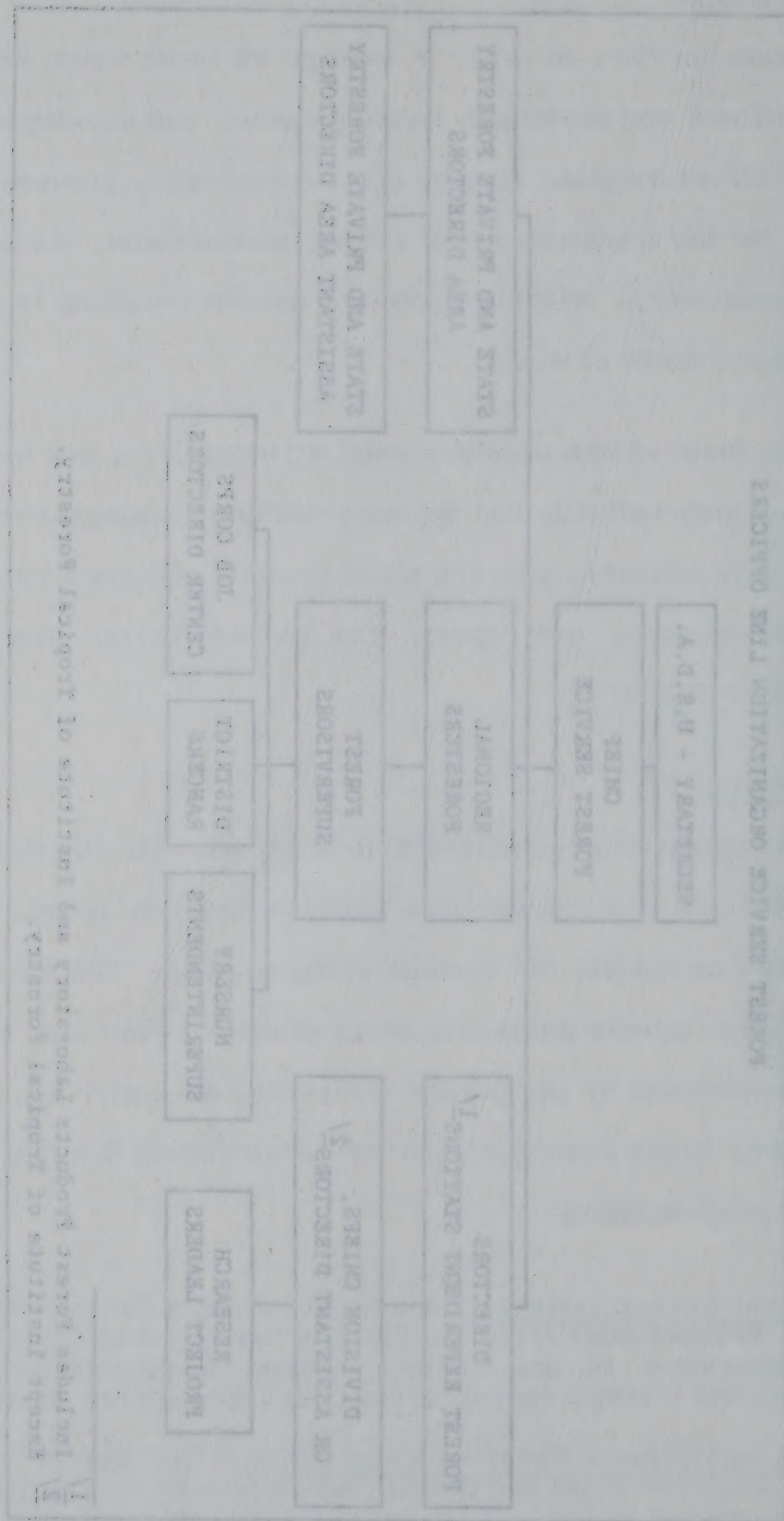
3. General

3. Organization

FOREST SERVICE ORGANIZATION LINE OFFICERS



^{1/} Includes Forest Products Laboratory and Institute of Tropical Forestry.
^{2/} Except Institute of Tropical Forestry.



Western States, it runs from the Chief to the regional forester. The regional forester or a designated assistant regional forester delegated by him deals directly with the State forester. Forest supervisors and district rangers may work with State officers and private landowners on specifically assigned jobs. Generally, their activities relating to State and private forestry are incidental to National Forest management and the general information services.

The line of responsibility and authority for State and private forestry work in the Northeastern and Southeastern States runs from the Chief to the Directors of the Northeastern and Southeastern areas. The Directors deal directly with the State foresters. As in the Western States, Forest supervisors and district rangers may work with State officers and private landowners on specifically assigned jobs.

Research - Responsibility and authority for the conduct of research follow the line from the Chief to the experiment station, Forest Products Laboratory, and Institute of Tropical Forestry Director, to the Assistant Director or Division Chief (FPL), then to the project leaders. (1)

Specific authority is delegated to the line officers in the three Forest Service areas of responsibility. Each of the line officers has functional staffs that carry out the assignments delegated to, and by, the line officer. These staff organizations are shown in Exhibits B, C, D, E and F. The responsibilities of the line officers are as follows

c. Line Officers

Chief - The Chief and deputy chiefs confine their efforts largely to major policy formulation, program direction, major plans, and agreements, and to reviewing and approving key personnel and project decisions. The Washington Office divisions work with the regions and experiment stations within the framework established by policy for the activities or functions assigned to them.

Based on the organizational procedures briefly outlined above, the principal responsibilities of the Washington Office are:

- a. National leadership in the fields of forest conservation and forest or mountain watershed management.
- b. Servicewide guidance and coordination for all programs, activities, and functions.
- c. Formulation and application of performance controls to be used internally for management purposes and externally to demonstrate adherence to legal and administration policy requirements established by higher authority.

(1) Organization and Management Systems in the Forest Service, F.S. 35 U.S.D.A./U.S.F.S. July 1970. P 11. (Hereafter cited as F.S.35.)

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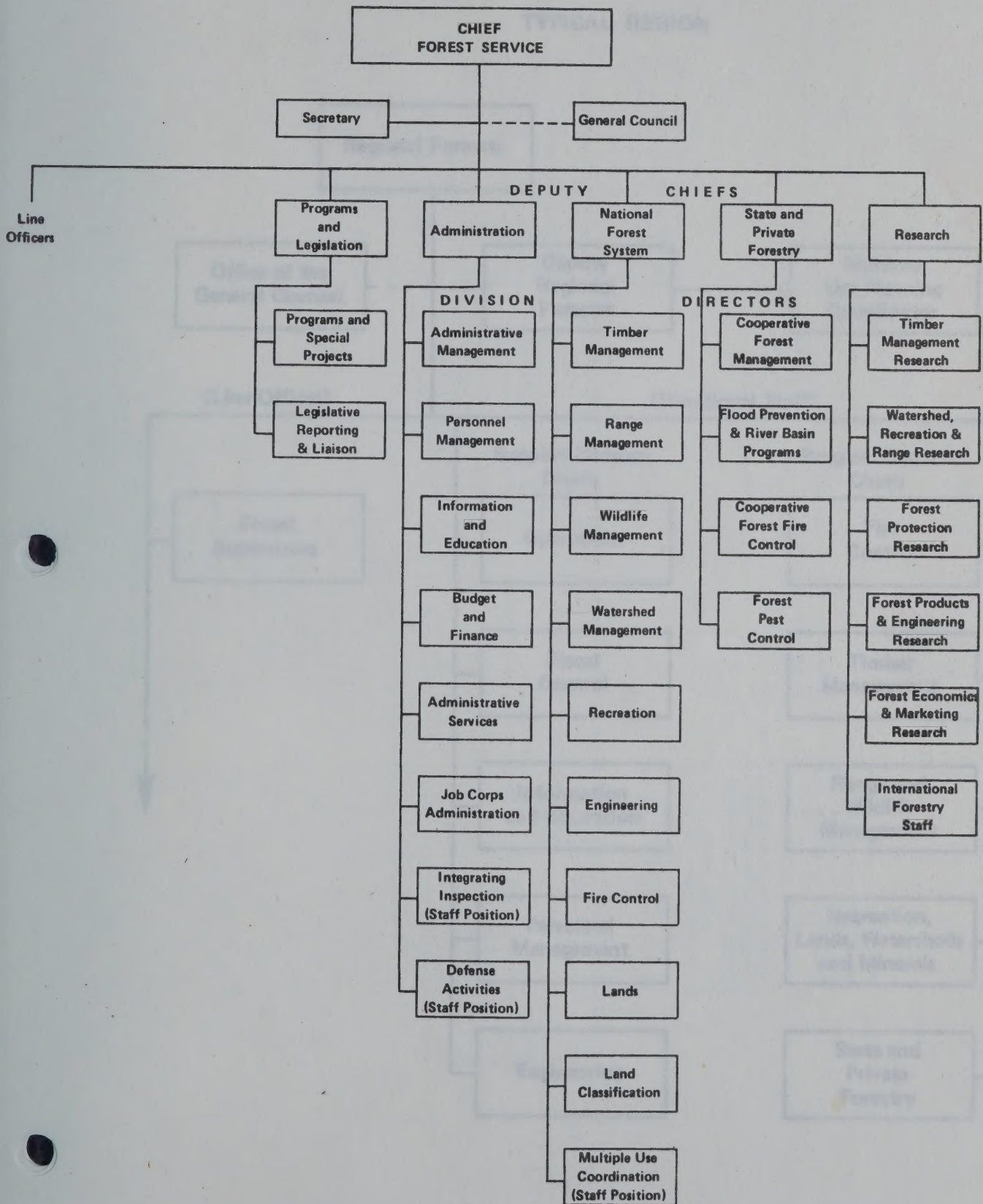
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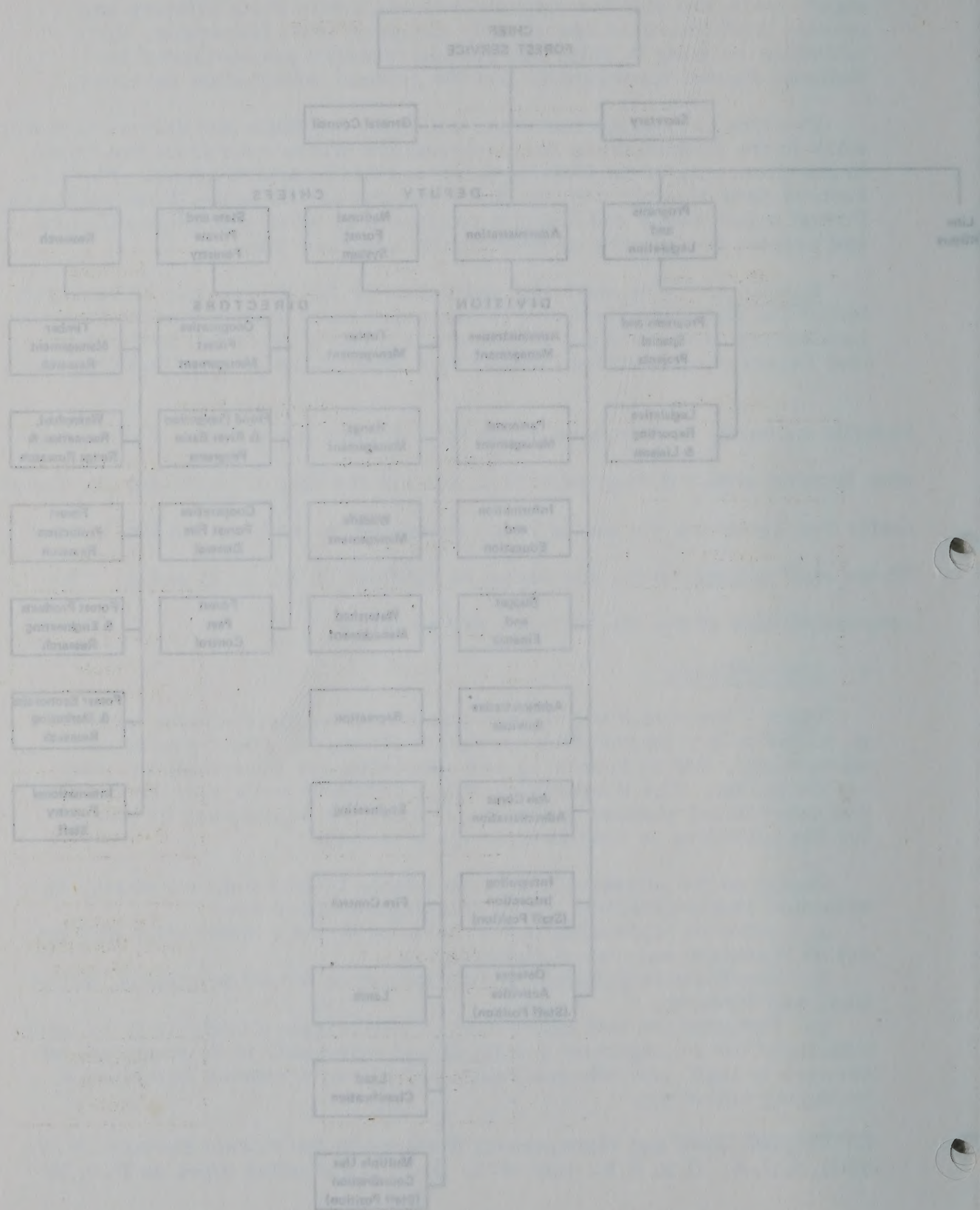
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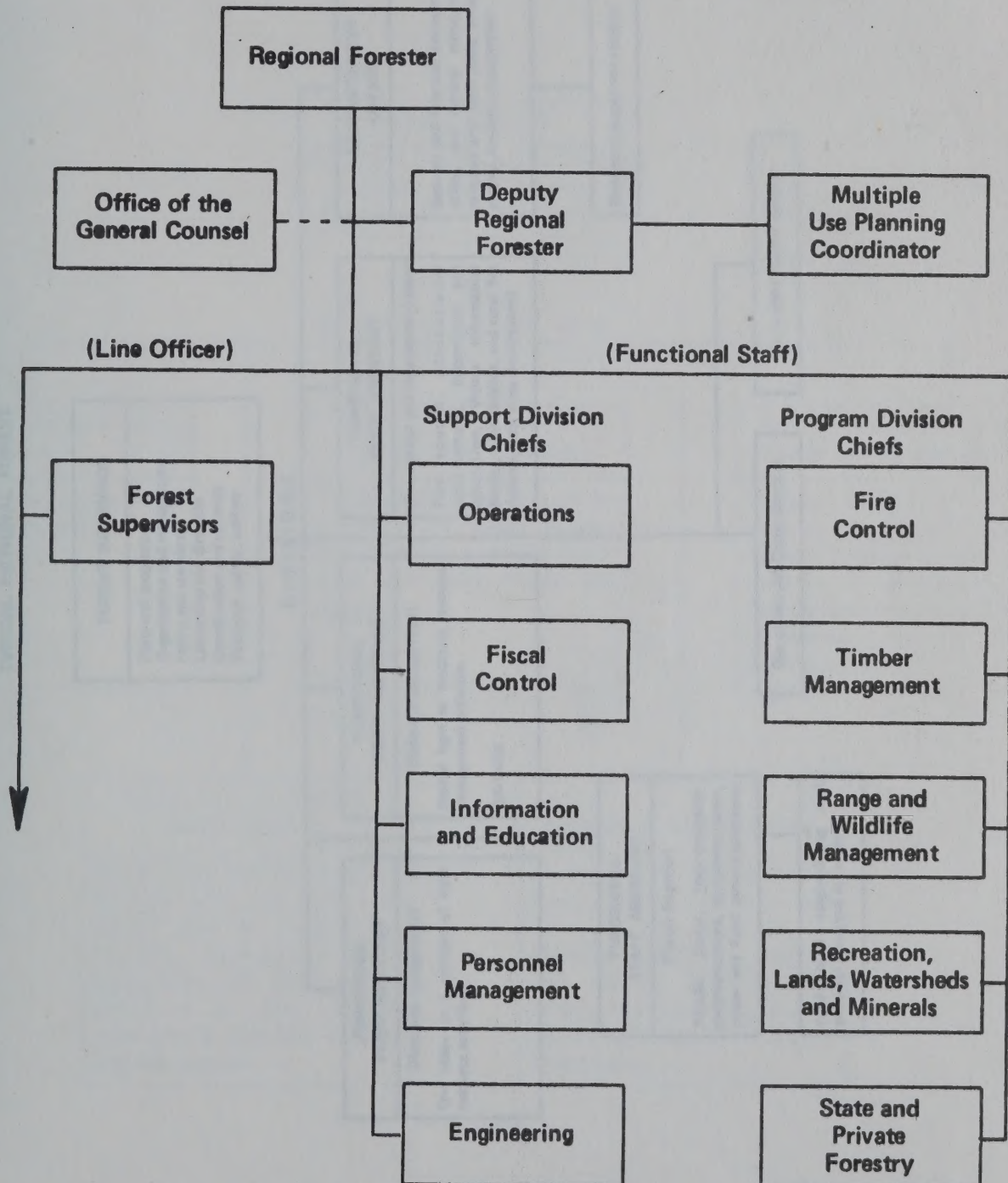
WASHINGTON OFFICE FUNCTIONAL STAFF



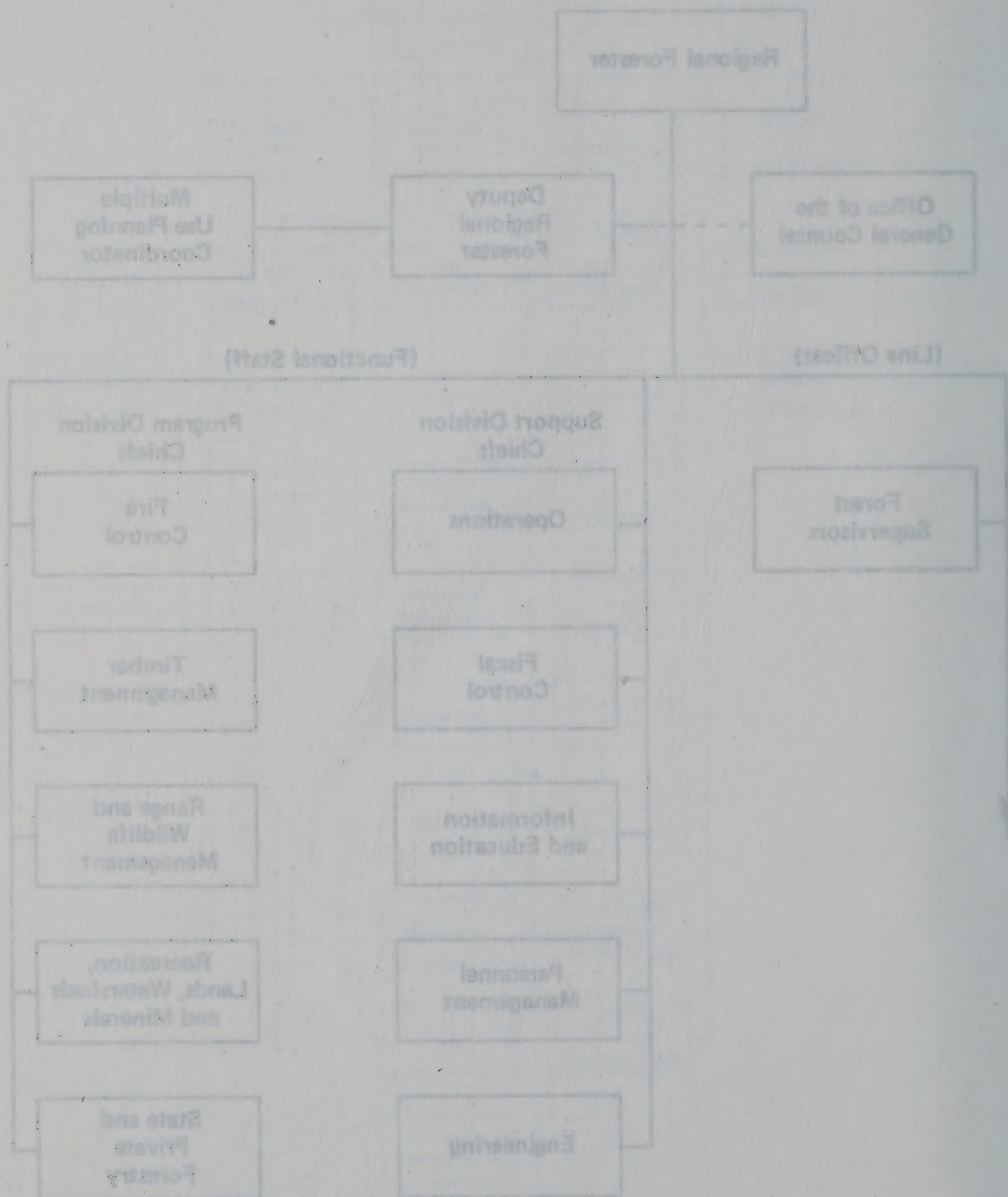
WASHINGTON OFFICE
FUNCTIONAL STAFF



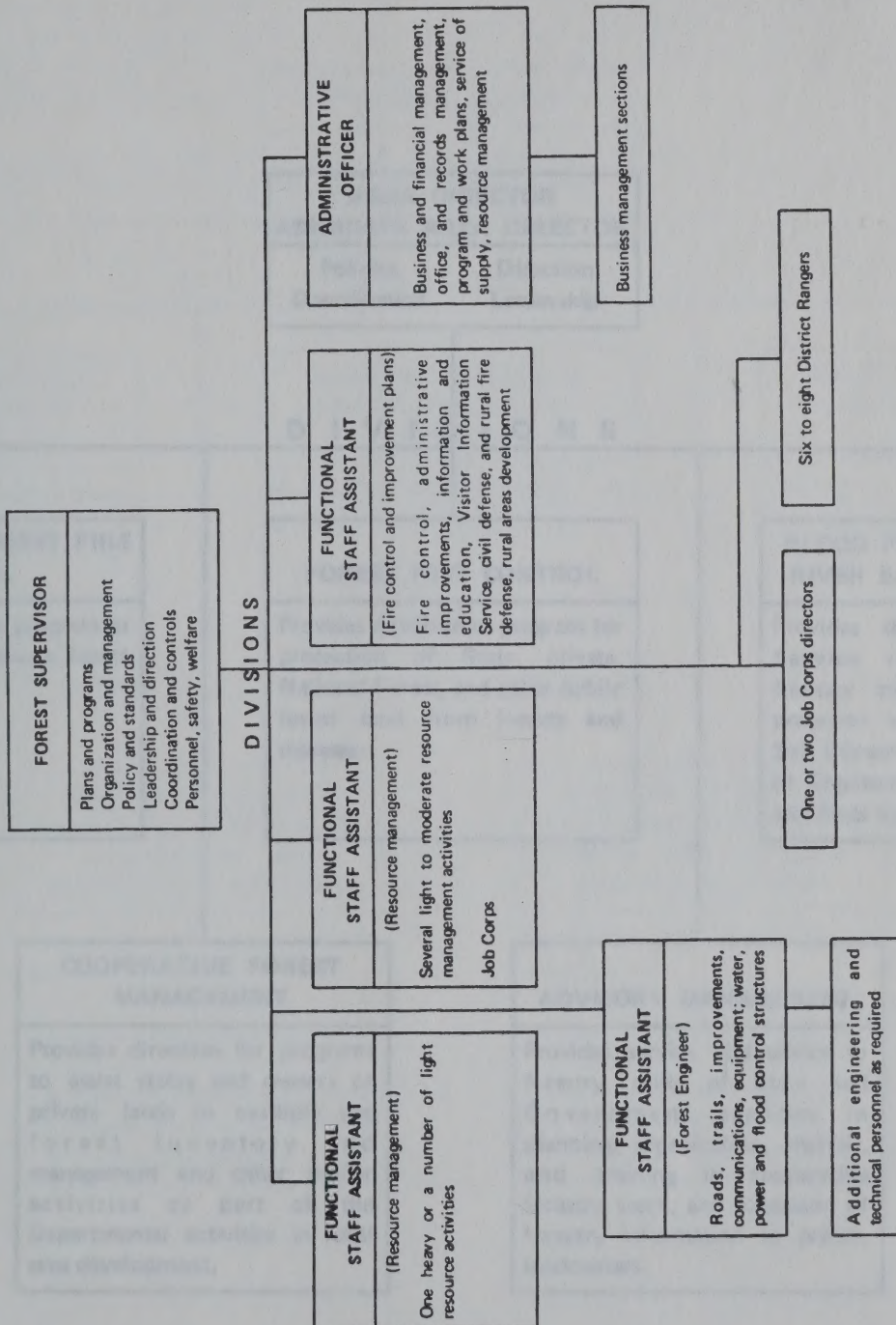
TYPICAL REGION



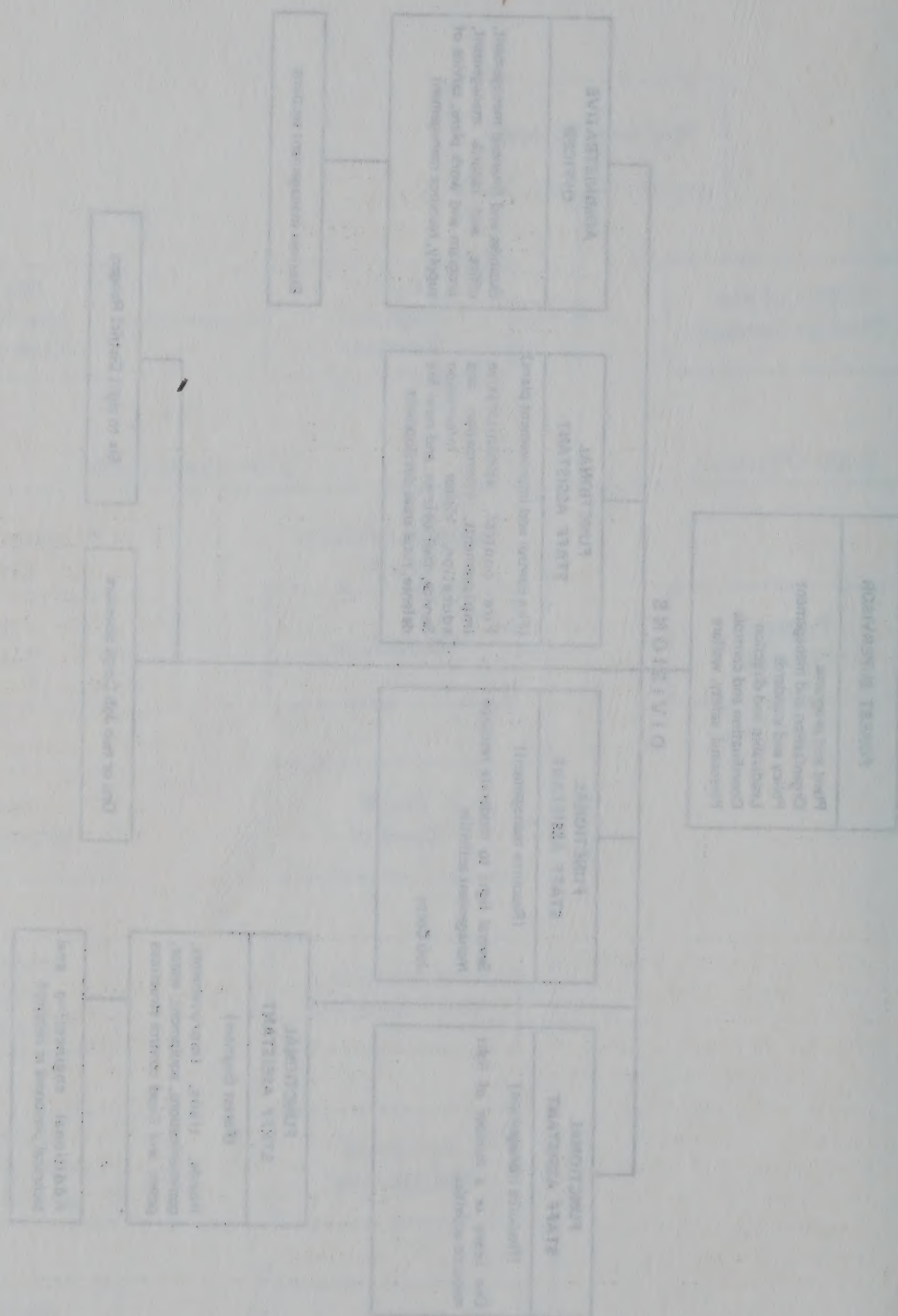
TYPICAL REGION



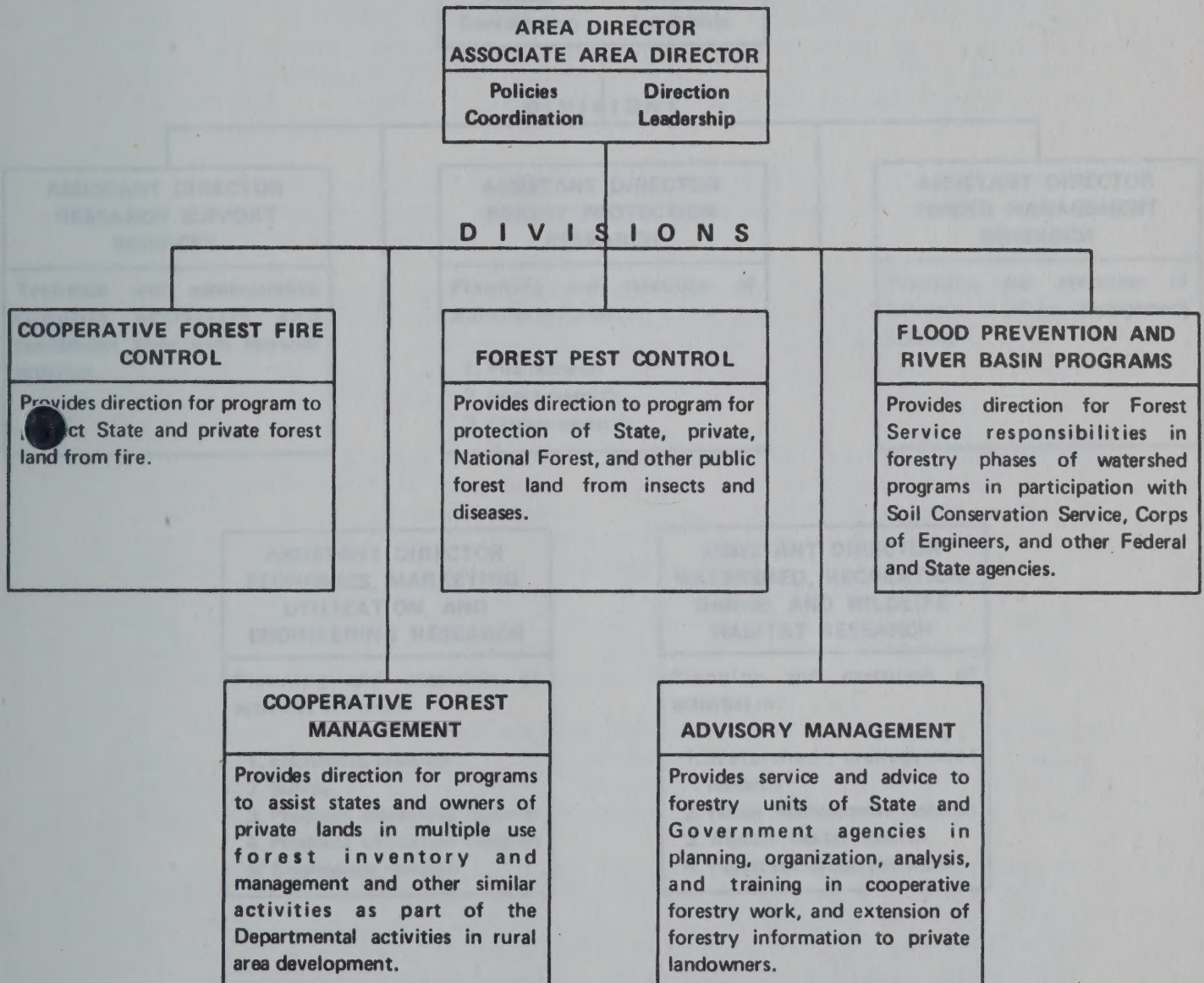
TYPICAL NATIONAL FOREST



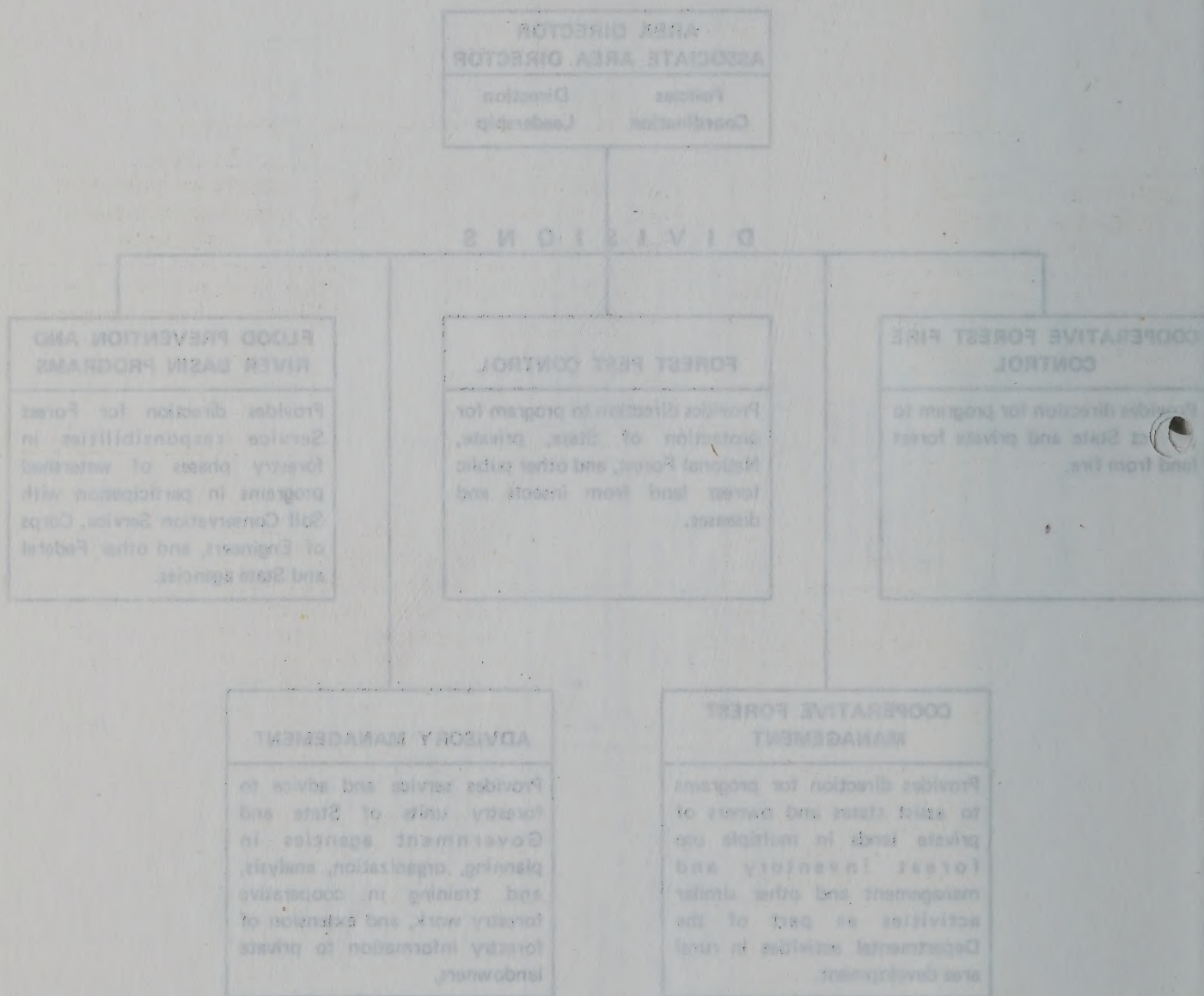
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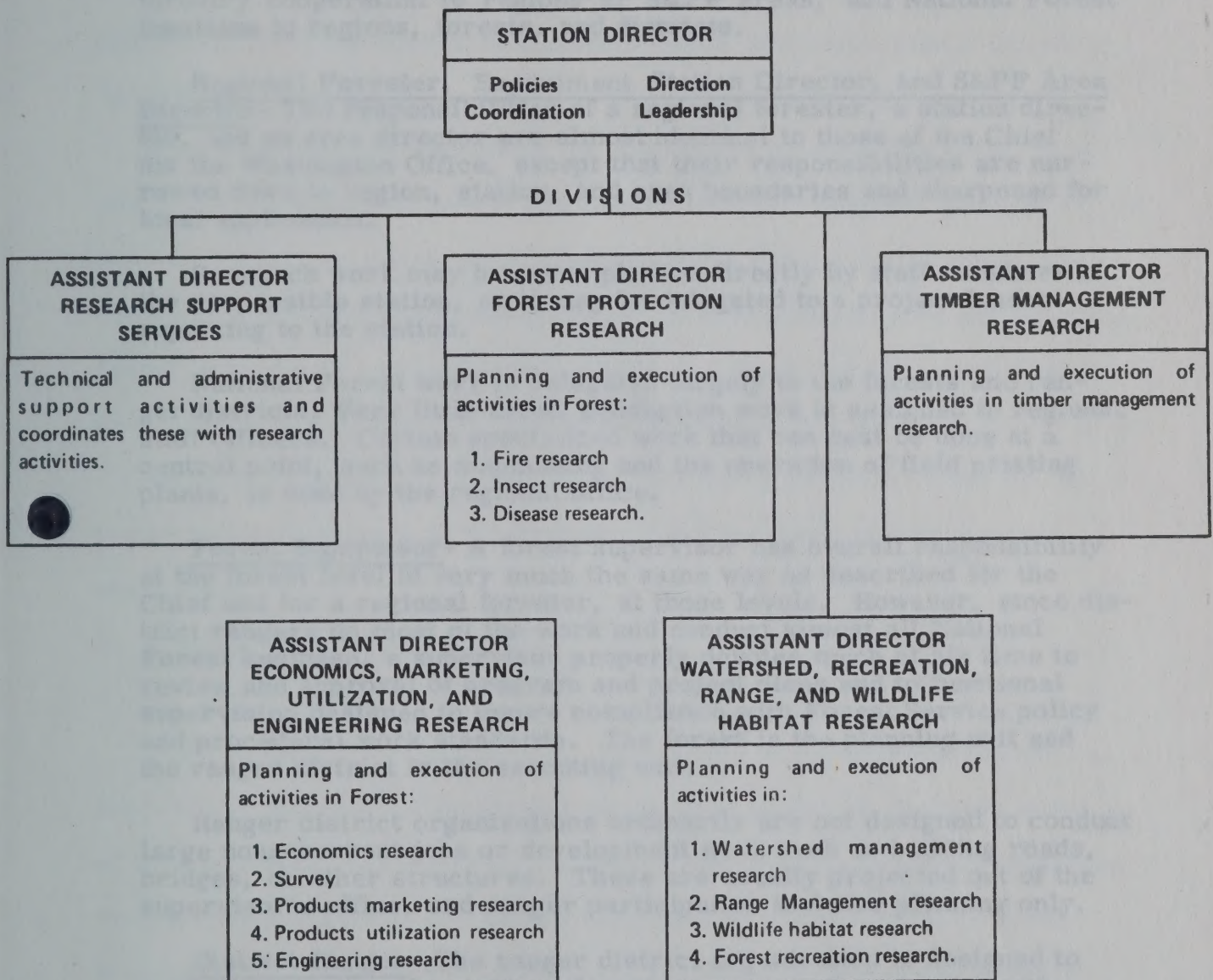
TYPICAL STATE AND PRIVATE FORESTRY AREA



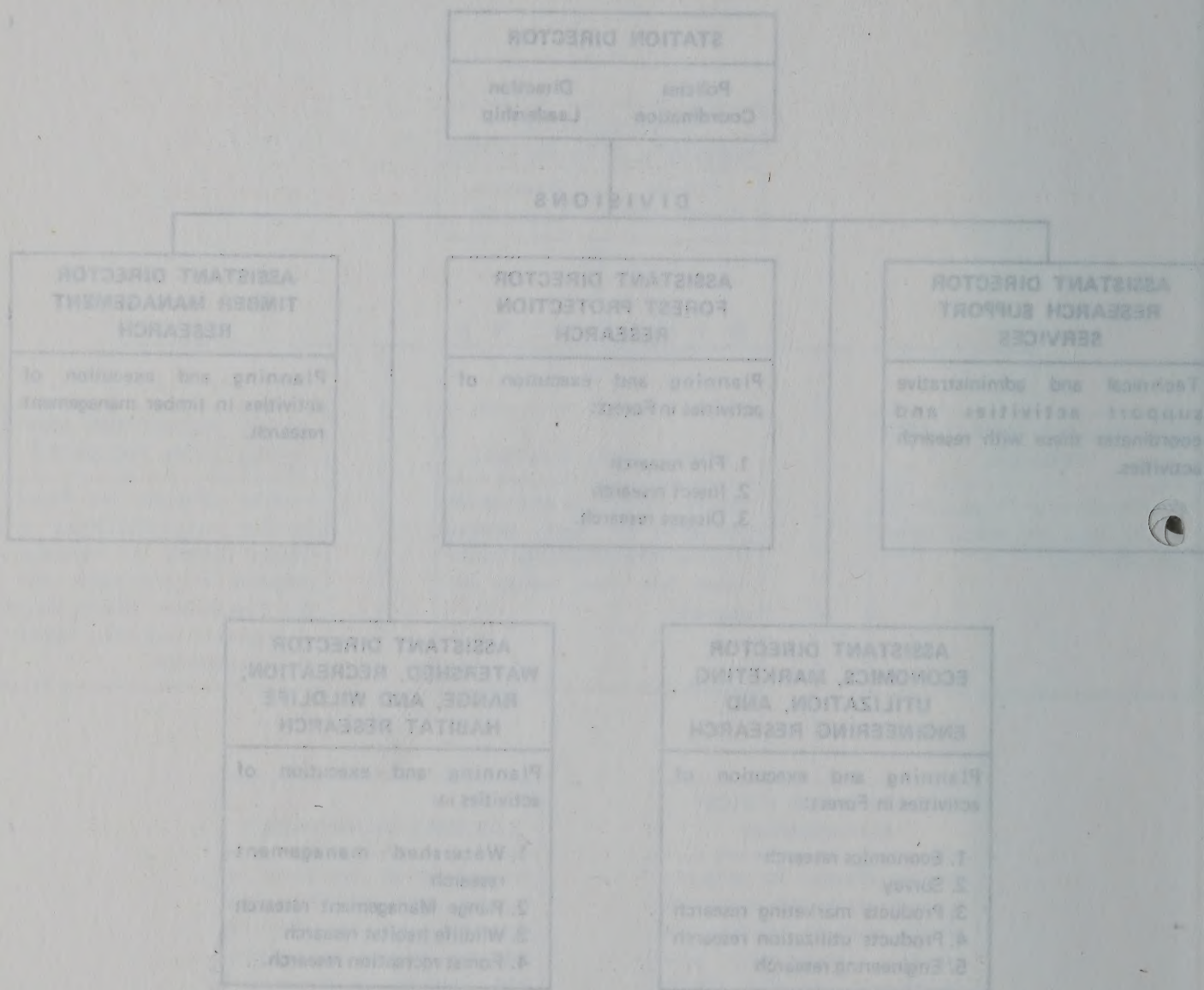
TYPICAL STATE AND PRIVATE FORESTRY AREA



TYPICAL REGIONAL EXPERIMENT STATION



TYPICAL REGIONAL EXPERIMENT STATION



d. Expert advice and assistance to regions and experiment stations on difficult or unusual problems.

With minor exceptions, the responsibilities retained by the Chief for the Washington Office are directly associated with the above described responsibilities. The rest of the total job is delegated to the field - research functions to experiment stations, State and private forestry cooperation to regions or S&PF areas, and National Forest functions to regions, forests, and districts.

Regional Forester, Experiment Station Director, and S&PF Area Director- The responsibilities of a regional forester, a station director, and an area director are almost identical to those of the Chief for the Washington Office, except that their responsibilities are narrowed down to region, station, and area boundaries and sharpened for local application.

Research work may be accomplished directly by staff members of the responsible station, or it may be delegated to a project leader reporting to the station.

National Forest work is delegated largely to the forests and ranger districts. Very little actual production work is assigned to regional staff officers. Certain specialized work that can best be done at a central point, such as mapmaking and the operation of field printing plants, is done by the regional office.

Forest Supervisor- A forest supervisor has overall responsibility at the forest level in very much the same way as described for the Chief and for a regional forester, at those levels. However, since district rangers do most of the work and conduct almost all National Forest business, a supervisor properly devotes much of his time to review and approval of program and project plans and to functional supervision designed to insure compliance with Forest Service policy and procedural work standards. The forest is the planning unit and the ranger district is the executing unit.

Ranger district organizations ordinarily are not designed to conduct large nonrecurrent jobs or development work such as building roads, bridges, or other structures. These are usually projected out of the supervisor's office, and ranger participation includes planning only.

District Ranger- The ranger district organization is designed to conduct virtually all recurrent forest resource and protection programs and activities. Accordingly, normal delegations made by the Chief strive to place responsibility for resource management and forest protection program execution on the ranger district. Either the supervisor's staff or the regional staff furnishes professional assistance to the ranger when needed. This means that the ranger is responsible for execution of plans developed on a forest basis. The ranger still assists in priorities, standards, and overall coordination, but he is relieved of the detailed planning requirements except operating plans. (2)

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District Ranger - The ranger district organization is designed to conduct virtually all recurrent forest resource and protection programs and activities. Accordingly, normal delegations made by the Chief strive to place responsibility for resource management and forest protection program execution on the ranger district. Either the supervisor's staff or the regional staff furnishes professional assistance to the ranger when needed. This means that the ranger is responsible for execution of plans developed on a forest basis. The ranger still assists in priorities, standards, and overall coordination, but he is relieved of the detailed planning requirements except operating plans. (3)

Ranger district organizations ordinarily are not designed to conduct large nonrecurrent jobs or development work such as building roads, bridges, or other structures. These are usually projected out of the supervisor's office, and ranger participation involves planning only.

Forest Supervisor - A forest supervisor has overall responsibility at the forest level in very much the same way as described for the Chief and for a regional forester, at those levels. However, since district rangers do most of the work and conduct almost all National Forest business, a supervisor properly devotes much of his time to review and approval of program and project plans and to functional supervision designed to insure compliance with Forest Service policy and procedural work standards. The forest is the planning unit and the ranger district is the executing unit.

National Forest work is delegated largely to the forests and ranger districts. Very little actual production work is assigned to regional staff officers. Certain specialized work that can best be done at a central point, such as mapping and the operation of field printing plants, is done by the regional office.

Research work may be accomplished directly by staff members of the responsible station, or it may be delegated to a project leader reporting to the station.

Director - The responsibilities of a regional forester, a station director, and an area director are almost identical to those of the Chief for the Washington Office, except that their responsibilities are narrowed down to region, station, and area boundaries and sharpened for local application.

Regional Forester, Experiment Station Director, and S&P Area Director - The responsibilities of a regional forester, a station director, and an area director are almost identical to those of the Chief for the Washington Office, except that their responsibilities are narrowed down to region, station, and area boundaries and sharpened for local application.

4. Expert advice and assistance to regions and experiment stations on difficult or unusual problems.

One of the specific delegations given to each line officer is the responsibility for the production, execution, and maintenance of various phases of the land use planning system.

The Washington Office produces the overall objectives, goals and policies for Management of the Forest Service lands. These objectives, goals, and policies are reduced to specifics in yearly and multi-yearly program directions.

The directions are refined at the Regions to meet the individual needs and to be responsive to unique Regional situations. Regional planning teams produce guidelines under which planning at the Forest levels will occur. Forest coordination and planning direction is developed by Forest planning teams in response to the Regional guidance. Land Use Plans are also developed by the Forest planning teams in conjunction with District Rangers.

Each level of the Forest Service hierarchy is responsible for the execution and maintenance of the guidelines and the plans produced by the next level.

3. General Policy Statement

a. Responsibilities

The Forest Service of the U.S. Department of Agriculture has the responsibility for national leadership in forestry within its assigned areas of responsibility. This involves participation in setting national priorities, formulating programs, and establishing the pattern of federal policies. It is charged with responsibility for the technical phases of the Department's forestry activities, including service to other Department agencies. It is responsible for the management and custody of federally owned forest land and forest rangeland assigned to the Department of Agriculture, Federal forestry research, and protection and technical forestry phases of

Department activities on non-Federal lands. Generally, there are three main areas of operation that are covered by Forest Service activities.

These are:

- (1) Management, protection, and development of the National Forests and National Grasslands.
- (2) Cooperation with State and private forest owners, wood processors, and public agencies to improve and extend the Nation's forest resources.
- (3) Research needed for (1) and (2) and for forest and range lands generally.

Within these operational areas, the Forest Service has the following specific responsibilities.

Leadership in Forestry. The Forest Service must provide overall leadership in forest and forest-range conservation, development, and use. This involves determination of forestry conditions and requirements and recommendations of policies and programs needed to keep the Nation's forest lands -- both public and private -- fully productive.

Administration of National Forests. Custody and management of the National Forests are made responsibilities of the Forest Service. Protection, development, and utilization of National Forest resources are accomplished under specific regulations of the Secretary.

Other Federal Lands Administered By Forest Service. As the land management agency of the Department, the Forest Service is assigned custody and management of other lands under control of the Department. These include land utilization areas acquired under the Bankhead-Jones Act, revested Oregon and California railroad lands, lands transferred under the Surplus Property Act, and Experimental Forests and ranges.

State and Private Forestry Cooperation. The protection and proper management of non-Federal forest land has been determined by the Congress to be in the national public interest. To accomplish this objective, various cooperative forestry programs have been authorized by the Congress whereby States, private landowners, and the Federal Government share the costs of such work. The Secretary of Agriculture has delegated the responsibility of representing the Federal Government in these programs to the Forest Service. This delegation includes responsibility to provide leadership to adequately develop and carry out these programs through cooperative agreements with State organizations, and by arrangements with other public agencies or private landowners.

The Secretary is also authorized to carry out soil and water conservation programs on both Federal and non-Federal lands. Responsibility for technical forestry phases has been delegated to the Forest Service.

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Research. Subject to coordination with other research programs of the Department by the Administrator of the Agricultural Research Service (and the Director of Agricultural Economics for statistical work), the Forest Service has been assigned responsibility for developing and conducting programs of fundamental and applied research in forestry. This includes forest and range management, including research on the five basic forest resources: (1) timber, forest soil and water, range forage, wildlife and fish habitat, forest recreation; (2) forest protection, including fire, insects and diseases; (3) forest products and engineering; and (4) forest economics, such as Forest Survey, forest economics, and forest products marketing.

b. Objectives and Management Principles

The Forest Service is concerned with managing, within its jurisdiction, the earth's resources. These resources -- air, water, vegetation, soil, minerals, wildlife, natural beauty, human and antiquities -- are utilized within either "use" or "non-use" guidelines that are established for the Forest Service. Specifically, the Forest Service is the primary timber management organization. This is not the Service's only function, however.

In 1960, the Multiple Use/Sustained Yield Act officially made water, wildlife, recreation, range and timber resources co-equal in management importance. Today, wild and scenic rivers, hiking routes, endangered species of wildlife and plant life, and the visual appearance of landscapes concern the resource manager as much as timber supplies and other "commodity" needs.

The Chief of the Forest Service sets objectives and policy guidelines and planning goals. These broad, overall objectives which the Chief originates, develops and maintains, identify the general role of the Forest Service in the society of the present and the future, and are used to guide decisionmaking throughout the Forest Service.

The general Forest Service objectives are to help boost national economic development, to enrich the quality of the environment, to enhance social well-being, and to increase regional development.

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Basic Forest Service policy which has its history and root in legislation is established through the directives issued by the Chief, U S. F. S. His directives are based upon responsibilities described in the laws, and by input from the President, other agencies, the Department of Agriculture, and the public, and by information developed within the Forest Service itself. Specific objectives and policies are identified on a yearly basis in the Chief's Program and Work Planning Advice. These objectives and policies are derived from Framework for the Future, dated February 1970, which provides a broad framework of objectives and policy statements identifying the general scope and character of the role of the Forest Service.

From an Agency policy position, the Framework for the Future provides the overall guidance for decisionmaking throughout the Forest Service. The objective and policy statements identify the general scope and character of the role the Forest Service should play now and in the future. The major policies that are listed in Framework for the Future are:

- Promote and achieve a pattern of natural resource uses that will best meet the needs of people now and in the future.
- Protect and improve the quality of air, water, soil and natural beauty.
- Help protect and improve the quality of the open space environment in urban and community areas.
- Generate forestry opportunities to accelerate rural community growth.
- Encourage the growth and development of forestry-based enterprises that readily respond to consumer's changing needs.
- Seek optimum forest land ownership patterns.
- Improve the welfare of underprivileged members of society.
- Involve the public in forestry policy and program formulation.

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- Encourage the development of forestry throughout the world.
- Develop and make available a firm scientific base for the advancement of forestry.
- Expand public understanding of environmental conservation.

B. PLANNING SYSTEM

1. General

Prior to 1971, the Forest Service planning system was known as Multiple Use Management. The Multiple Use Management procedures essentially involved administering Forest Service lands on a "resource management" basis (i.e., timber, mining, recreation, etc.). Land use plans served the functional plans in that land use areas were delineated for pre-determined resource uses without knowledge of environmental constraints. For example, in the Bitterroot National Forest, timber areas that were designated and later cut were later recognized as fragile soil areas where regeneration is extremely slow. Multiple Use Management involved two levels of planning for Forest Service lands, the Region and the Ranger District. At the Regional level, a Regional Multiple Use Management Guide was prepared "to establish a pattern of multiple use management for National Forest lands in the Region." The Ranger District Multiple Use plans covered management decisions and delineated specific management areas under the direction and coordinating requirements established in the Regional guide. These two documents were developed under broad coordinating instructions that were developed at the Chief's level.

In 1971, the Multiple Use Management procedures were revised. This revision has been serving as an interim planning methodology while the Forest Service planning system undergoes further revision and refinement. The "new" planning procedures (FSM 8000, National Forest Land Use Planning) were made official in early December 1973.

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The procedural concept of the revised planning system is that the formulation of a plan involves a series of steps beginning with the identification of National needs and objectives and ends with a plan for managing a specific unit of land for specific purposes. The sequence of planning direction and plans follows.

At the top of the hierarchy is the planning direction issued by the Chief. This direction includes documents such as Framework for the Future, Environmental Program for the Future, The Program Budget and the Chief's Annual Program and Work Planning Advice.

The second level in the hierarchy of planning direction is the direction issued by Regional Foresters. These documents include Area Guides and the Regional Budget and Work Planning Advice.

The third level in the hierarchy of planning direction and plans is at the National Forest level. Here the Forest Supervisor must combine the planning direction received from the Regional Forester with specific information about the National Forest. The product is the Forest Land Use Plan which serves to direct and coordinate further planning on the Forest as well as the uses and activities carried on within the Forest on a day-to-day basis.

The fourth level of land use planning is planning for units of land smaller in size than a National Forest. Directed and guided by the Forest Land Use Plan, Unit Plans are made as needed to intensify the planning and resultant decisions for this smaller area. Unit Plans must assure that plan decisions are compatible with National, Regional, and local factors.

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that provide the general scope, character, and limits of Forest Service activities. The total planning process is shown in Exhibit G.

The "new" land use planning system follows and responds to a broadened hierarchy of direction, guidance and plans, and emphasizes land management instead of resource management. Functional resource plans in the new system are now oriented to serve the land use plans.

This planning procedure has actually been available to Forest Service line officers for some time since draft copies of the 8000 Series were sent out for review. The new revised planning system has already been implemented in some Regions because of this preliminary dialogue.

2. Planning System Operation

a. Land Use Planning

(1) Regional Level - Planning Areas, Planning Area Guides

The first stage of actual implementation of the objectives and direction produced at the Washington level of the Forest Service occurs in the nine Forest Service regions.

The Regional Foresters' first step in the planning process is to establish Planning Areas. The Planning Areas have their own particular makeup of people, topography, climate, problems and needs, but they are based on generally homogenous characteristics of land, social, and physical resources. The Planning Areas should specifically meet the following criteria:

1. General similarities in physical characteristics, resources, economics, and social needs that give rise to similar management opportunities and constraints.
2. Sufficient size to provide for flexibility in patterns of land development and use of resources.

The assumptions made about these Planning Areas are

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3. Planning System Operation

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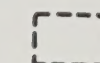
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U.S.F.S. PLANNING SYSTEM



FOREST LAND USE PLAN (COMPRISED OF PARTS I AND II)

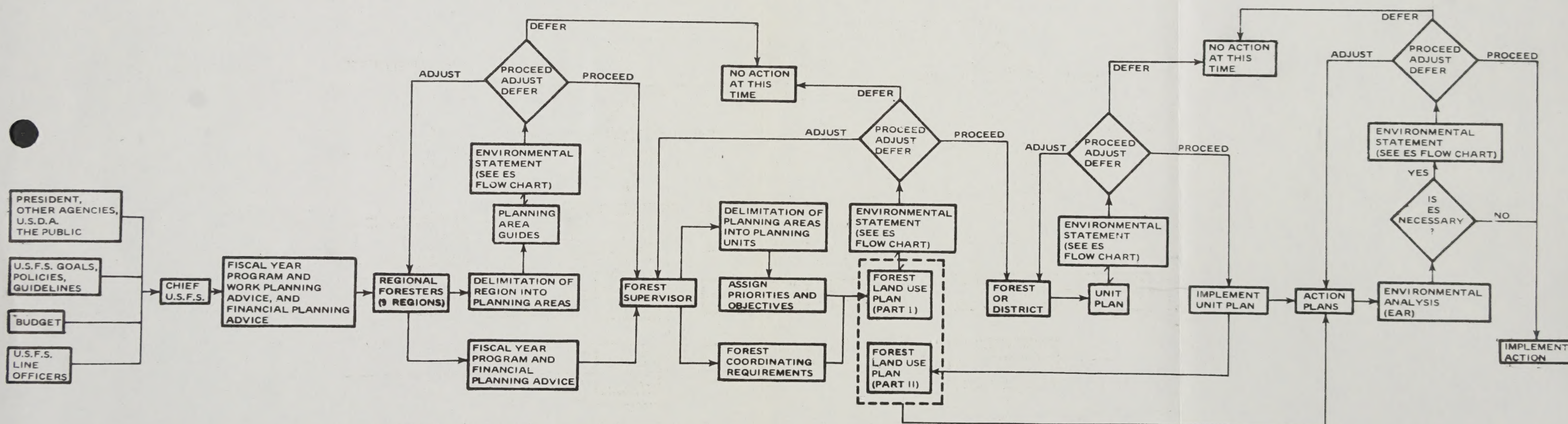
WASHINGTON

REGION

FOREST

PLANNING UNIT

PROGRAM / ACTION



U.S.S. PI



RECEIVED



1. The area will be basic for all Forest Service land and resource management programs in that area.
2. This common denomination should allow all agencies or governments to contribute and receive resource data and relate demand allocations.
3. That in order to consider all aspects of planning and management, responsible managers at all levels of any organization must coordinate their planning efforts, irrespective of administration or government boundaries.

A Planning Area Guide is prepared for each of the Planning Areas within the Region. The guide establishes direction for planning and management of the National Forests within the Planning Area.

The guide also specifies the peculiarities of the area as compared to other areas and provides an interpretation of the significance to management of these peculiarities.

The guides delimit and explain the following parameters

1. Social Situation
2. Economic Situation
3. Environmental Situation
4. General Assumptions for Land Use Planning
5. Quantify Future Demand Estimates
6. Preliminary Output Targets
7. Specific Multiobjectives
8. Measures Appropriate to Help Insure Planning Coordination With Other Federal Agencies and Other Government Levels

(2) National Forest Level - Forest Land Use Plans

The National Forest level of planning is considered to be the strategic point where the laws, objectives, policies, constraints, funds, etc., that come from both within and outside of the Forest Service, the local and regional philosophies for environmental protection, and demands for goods and services come together.

The merging of these goals, directions and policies is accomplished in the Forest Land Use Plan, which can be considered to be the key land use coordinating tool. Besides bringing together the diverse parameters that influence the management of the Forest, the Land Use Plan also provides (1) coordination between resource allocation targets and physical actions, (2) the basis for weighing and balancing desired results with consequences, (3) a framework for providing allocations of personnel and funding for assigned and agreed upon projects and (4) the coordination and balancing of functional plans with land management assignments.

The Forest Land Use Plan consists of two parts.

- a. Part I - A section composed of broad planning objectives and production targets, a graphic display of Planning Units and planning priorities, basic assumptions, a Forest situation statement, a description of Multiple Use Zones, if used, and coordinating requirements for the Forest. Coordinating requirements are statements establishing the necessary coordination or relationships between Planning Units, resources, uses and activities to complement the broad direction provided by the Planning Area Guide. Forest Supervisors coordinate the development of these statements with adjoining land managers. The Forest is further subdivided into Planning Units. These units are areas of land, varying in size, that are characterized by particular patterns of social, economic, and environmental conditions. The Planning Units may cross administrative, State and other political boundaries. In defining these units, the objectives are to preserve as much uniformity as possible in relationships significant to land management.
- b. Part II - A library or collection of Unit Plans developed for land areas within and related to the National Forest. Within the direction established by the Regional Area Planning Guide and the Forest Coordinating Requirements, the Unit Plan covers all aspects of the environmental, economic, and social consideration for the unit. This is a total land use plan which is the basis for all action within that unit. All programs, activities, and services should recognize and work within the plan for the unit.

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(3) Planning Unit Level - Unit Plans

The basic land unit for which action plans are prepared is the Planning Unit. Planning Units are subdivisions of Planning Areas, and serve the function of reducing the diversity that is present in Planning Areas. Whereas a Planning Area may cover all or most of a state, as a geomorphic area such as the Appalachian Mountains, a Planning Unit is generally quite small, ranging from a few thousand to one or two hundred thousand acres, depending on the parameters used for delineating the unit. Planning Units are generally characterized by particular patterns of topography, climate, and land use. The purpose of each Planning Unit is to:

1. Provide a logical land base for the development of land use plans. Private lands closely interrelated to the development of National Forest lands will be included within the Planning Unit boundaries.
2. Ensure that specific areas of land that are significantly interrelated to the use and management of the resources are encompassed within one planning setting.
3. Ensure consistency in the planning setting from which management decisions are derived.

Unit Plans are prepared for each Planning Unit. The plan is developed under the direction established in the Forest Land Use Plan, Part I, and considers all aspects of management within the Planning Unit.

The formulation of Unit Plans involve the following steps:

1. Assign priority to order of study of Planning Units.
2. Recognize and document the planning objectives and targets relevant to the Planning Unit.
3. Evaluate land potentials, current resources, and public needs.
4. Formulate resource activity possibilities.

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4. Formulate resource activity possibilities.

5. Formulate alternative plans which resolve various activity conflicts and achieve varying levels of contributions to the planning objectives.
6. Analyze the differences among alternative plans to show trade-offs among the various planning objectives.
7. Select a recommended proposal from among the alternatives based upon an evaluation of how well each alternative satisfies the various objectives for the Unit and Forest.
8. File draft Environmental Statement.
9. Review Comments received on the Draft Environmental Statement and file the Final Environmental Statement.
10. Make and document the decision on implementing the appropriate Unit Plan alternative.

Most of the Unit Plans observed in conjunction with the case studies were combined with Environmental Studies. See Section B-3, Environmental Statements, and Section C for a discussion of these specific Unit Plans and their contents.

Priority of Study for Planning Units

Since the Forest Service cannot work on all Planning Units simultaneously, priorities are established according to the following criteria:

- a. Complex long-standing resource problems previously identified within the unit. This can also include resources that have a national significance.
- b. Desires of people for utilization and/or preservation of land resources in the area.
- c. Stated or anticipated congressional enactments and enactments and executive actions.
- d. Presupposed importance of the unit as a major contributor to national economic development, environmental quality, social well-being, or regional development.
- e. Proposed or possible management which would result in irreversible or irretrievable commitments of resources.
- f. Critical need to reevaluate fire, insect and disease protection objectives.

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tion objectives.

Objectives for Planning Units

In this step, the objectives that apply to each particular Planning Unit are specified. When these objectives are delimited, they are documented and given to the Planning Team as a part of their instructions. These objectives provide the basis for using the resources within the Planning Unit to meet short and long-term needs. The importance of the objectives is not weighed until a later stage in the process.

The objectives are established within the parameters established by the Planning Area Guide and refined by the Forest Land Use Plan (Part I) to respond to the unique situations within the Forest.

Evaluate Land Potentials, Current Resources, and Public Needs

This step involves inventory procedures. An inventory of the available resources is necessary so that a series of alternative plans can be developed. The inventory includes both primary and secondary research.

Fundamentally, the purpose of the resource inventory is to indicate how much of a particular thing is present, where in the Planning Unit it is located or distributed and what condition it is in.

The inventory stage involves the accumulation of both physical and cultural data (i.e., soils, vegetation, slope) and existing land utilization in conjunction with the needs and desires of the public, as well as an economic analysis. Since there are specific physical variations among different areas, certain physical categories are emphasized as a result of the unique situations in these areas. Examples are slope in mountain areas, soils in the extreme north, and vegetation type in the mixed forests. Because of this difference in physical

In this step, the objectives that apply to each particular planning unit are specified. When these objectives are defined, they are documented and given to the Planning Team as a part of their instructions. These objectives provide the basis for using the resources within the Planning Unit to meet short and long-term needs. The importance of the objectives is not weighed until a later stage in the process.

The objectives are established within the parameters established by the Planning Area Guide and refined by the Forest Land Use Plan (Part I) to respond to the unique situations within the Forest.

Evaluate Land Potential, Current Resources, and Public Needs

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emphasis, some inventories are skewed toward one resource category or physical element. Economic and social analysis, in most cases, must be done by staff personnel from the Regions, other Forest Service personnel, or out of service consultants. Most of the other specialists the planning team requires are available at the Forest and District levels.

The inventory process involves, besides simple data gathering of geology, soils, roads, forage, and other information, a determination of land capability. This concerns an analysis of the resource values and uses that the land is capable of supporting as well as constraints of the land, such as fragile soils, steep topography, and unique wildlife habitat. Some of the constraints regarding utilization can be overcome by application of technologically superior methods if a resource is extremely valuable (e.g., timber on steep slopes that can be harvested by cable or balloon retrieval instead of skidding).

Additional input is obtained from the public and is integrated into the Unit Planning process at this stage. Generally, the public is informed that a project is under consideration by means of newspaper articles and/or Forest Service public announcements. The public is usually invited to provide information concerning their needs and/or desires via letters, questionnaires and maps, and through participation in public meetings.

Formulate Resource Activity Possibilities

This step requires the interdisciplinary planning team to identify and consider the various functional activities that are possible within the Planning Unit. These possible functional activities for management, developed on a resource-by-resource basis, will indicate the resource

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This step requires the interdisciplinary planning team to identify and consider the various functional activities that are possible within the planning limit. These possible functional activities for management developed on a resource-by-resource basis, will indicate the resource

capabilities relative to specific commodities, services or environmental amenities.

Formulate Alternative Plans

When alternative management schemes are evaluated, the needs and demands of the public, the goals and priorities of the Forest Service, and the capability of the land are analyzed to produce feasible land management and resource utilization opportunities. In many cases, the options for land use alternatives are limited by previous decisions made at the Regional and Forest levels.

The Planning Unit by definition is an area that is generally homogeneous in terms of a resource or a land use potential. Therefore the alternatives often only involve that specific resource or land use potential (i.e. mining, timber, recreation, wildlife, etc.).

In other cases the Forest Service lands are too diverse to designate individual resource uses or activities for a Planning Unit base. Therefore there will be several non-related uses indicated for a unit. The alternatives for management will, however, be limited by both the Forest Services' legal responsibilities (i.e. produce timber, provide recreation, maintain water quality) and physical constraints (i.e., steep slopes, unique wildlife habitat, water zones, etc.).

The opportunities for management can be delineated by means of management units, or as specific locations for utilization in the form of Unit Plan alternatives. Often, however, selection of certain planning objectives results in public controversy because the satisfaction of one objective affects others.

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The Planning Unit's definition of an area that is generally homogeneous in terms of a resource or a land use potential. Therefore, the alternatives often only involve that specific resource or land use potential (i.e., mining, timber, recreation, wildlife, etc.). In other cases the Forest Service lands are too diverse to design individual resource uses or activities for a Planning Unit base. Therefore there will be several non-related uses indicated for a unit. The alternatives for management will, however, be limited by both the Forest Service's legal responsibilities (i.e., produce timber, provide recreation, maintain water quality) and physical constraints (i.e., steep slopes, riparian wildlife habitat, water zones, etc.).

The opportunities for management can be delineated by means of management units, or as specific locations for utilization in the form of land use alternatives. Often, however, selection of certain planning objectives results in public controversy because the satisfaction of one objective affects others.

All of the Unit Plans but two observed during the case studies proposed land uses that were based on mixes of resource uses. The plans called for several land use (management) areas that primarily emphasized timber management, wildlife habitat, aesthetics, either primitive or roaded recreation, scenic values, or watershed preservation. Some management areas emphasized more than one resource if the utilization was compatible (i.e. timber management to improve wildlife habitat or salvage logging in recreation-oriented areas). If unique resources were present, they were identified separately (i.e., rare vegetation species or areas of historical significance).

The two plans that did not propose a mix of land uses emphasized only one management objective. The Phosphate Planning Unit (Caribou N.F., Idaho) was created around a mineralized area and emphasized only mining. The Madera Canyon Unit Plan (Coronado N.F., Arizona) proposed only recreational uses while upgrading the quality of other resources by placing limitations on the use of certain areas.

Alternative Plan Analysis

In order to analyze the various alternative plans, the following determinations are considered:

1. Analysis Requirements
 - a. How effective is the alternative plan in meeting the Planning Unit objectives?
 - b. What are the differences among alternative plans in terms of their contribution to the objectives?
 - c. What is given up or traded off among plans in terms of contributions to the objectives?
2. Reassessment of Planning Inputs. In addition to analyzing the alternatives, the entire planning process is supposed to be reviewed at this point to assure that changes that may have

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Alternative Plan Analysis

In order to analyze the various alternative plans, the following

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2. Reassessment of Planning Inputs. In addition to analyzing the alternatives, the entire planning process is supposed to be reviewed at this point to assure that changes that may have

been added are considered. Some of the points considered at this time include

- a. Is the level of inventory (social, economic, environmental) adequate as a basis for selection of a Unit Plan?
- b. Do the alternatives considered meet most of the planning objectives?
- c. Have policy changes occurred during planning process?
- d. Have resource capabilities or technical aspects of management changed?

Plan Selection

The end result of the plan formulation process is the selection of a proposed Unit Plan from the alternative plans. At this point there is a set of alternative plans, each of which could be selected on its own merits as a Unit Plan or recommended course of action. The choice is not of the most justified alternative, since each alternative has its own merits in terms of its contribution to a given mix of planning objectives. The alternative selected by the Forest Service is supposed to reflect consideration of the environmental analysis, the priorities and preferences expressed by the public affected by the Unit Plan, and the goals and objectives of the Region and Forest Plans.

(4) Functional Plans

Implementation of the Unit Plan is actually the implementation of functional activities on a Forestwide scale. Functional programs are initiated for the specific management areas delineated in the Unit Plans. Specific plans for these activities (i.e. Timber Management, Recreation, Fire Protection, etc.) are made or revised under the coordination and direction of the Forest Plans, and carry out allocations and direction made for each Planning Unit. Thus, functional plans help to define current

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and future production goals for Planning Units, and contain the technical specifics for the projects.

b. Program Planning

Program planning in the Forest Service is designed to serve both the long and short-term planning requirements for the land use areas indicated in the Unit Plans. The program planning system employs interactive processes that produce long- and short-range decisions.

To contrast these two processes, the long-range process is "strategic." Long-range planning and decisionmaking deals with a period of many years and is concerned with decisions at a general level. It is concerned with basic strategies, allocations, systems, and structures for action. It establishes basic long-range direction for the different organizational levels of the Forest Service and provides the frame of reference from which short-range planning and decisionmaking is derived.

Short-range planning and decisionmaking concerns explicit allocations, schedules, action projects, and expected outcomes. It deals with future actions anticipated within 1 to 5 years and normally involves both scheduling and budgeting. The resulting short-range decisions generate a group of activities such that both the short- and long-range effects of the next few years' work are consistent with the guidelines set forth by the long-range decisions.

c. Linkage Between Plans and Programs

The program planning system is intended to represent a linkage between the policy direction established by Framework of the Future and the on-going Forest Service activities now underway or planned for the immediate future.

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Program planning is defined by the Forest Service as the process of setting objectives, evaluating alternative courses of action, establishing

output targets, and projecting costs, all based on negotiation and interaction within and between organizational units. It links single and multi-year planning and budgeting by integrating the development of the fiscal year program budget with Phase II of the Environmental Program for the Future.

The program planning developmental process begins at the national level where long- and short-term Presidential, Departmental and Agency policies are translated into proposed direction for the next 10 years. Major inputs into this initial direction-setting effort have been the recent reports to the President's Advisory Plan on Timber and the Environment, the OMB Timber Issue Report, the work of the Roadless Area Review Task Force, the Forest Range Environmental Study, and the internal work projections of the Forest Service.

The overall policy document for the Forest Service is Framework for the Future. However, it does not focus on a particular time period. This is the function and intended purpose of the Environmental Program for the Future.

Environmental Program for the Future

The Forest Service has developed an "Environmental Program for the Future" (EPFF) that looks ahead for a 10-year period. The program has been developed in response to the President's statement of June 19, 1970, commenting on the findings and recommendations of a task force on Softwood Lumber and Plywood. The EPFF is also responsive to the President's Environmental Quality Message of August 10, 1970, the National Environmental Quality Act, and subsequent Executive Orders, CEQ Guidelines, OMB Bulletin, Secretary's Memoranda and Forest Service Directives. This program attempts to provide direction

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for the Forest Service from a policy standpoint by improving the balance among the three major areas of Forest Service responsibility - National Forest Administration, Forestry Research, and State and Private Land Cooperative Programs.

This program establishes goals for resource management, forest protection of the National Forest System, State and Private Forestry and research. Resource Management includes: Wildlife Habitat Management; Recreation and Wilderness; Range Resource Management; Soil and Water Management; Timber Management; Minerals Management; Land Use Management and supporting activities such as Forest Land Management Operations; Forest Pest Control; Fire Protection: Structural Improvements for Fire and General Purpose; and Forest Roads and Trails.

The EPFF and the 5-year Program Budget serve as parts or outputs of a dynamic process that uses inputs from all levels to develop both long- and short-term direction. Whereas the Framework for the Future does not focus on any particular period of time or deal with any specific programs, the "Environmental Program for the Future" does focus on a period of time, FY 1975 - 1984 and the Program Budget on 1975 - 1979, and they deal with specific programs. Since cost information becomes outdated quickly, these documents attempt to display in detail only the first 5 years of activities and the funding required to implement the programs. These estimates are used to help project accomplishment targets and program direction for FY 1980 - 1984.

Although the EPFF has been referred to as the "Optimum Program," the level of activities recommended within the Program are expected to be feasible. Feasibility in this sense means that program mixes and ranges of probable results must be capable of accomplishment during the next 10 years.

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The EPFF is the basis from which policy is made more specific through guidelines issued by the Chief, which in turn provide the guidance to be followed by the Forest Service staff and line personnel in the development of proposals. Program Planning Instructions are issued designating the relative importance of program areas and direction on program and management requirements. Exhibit H shows the process by which information flows from the national level down and from the local level up.

The Forest Service program planning effort is intended to result in three products: a specific course of action for each Region and Area that is charted on the basis of slowly increasing fund availability (constrained to historical funding trends) and two comprehensive statements of Forest Service Program Direction (the Environmental Program for the Future and the "Fiscal Year Program Budget").

d. Integration of Program Planning with NEPA

Recently, the Forest Service has begun a modification to the planning and decisionmaking processes to better deal with the Agency's responsibilities. This system, referred to as "Unified Planning and Decisionmaking", is intended to provide a more efficient approach to dealing with program planning. It has been brought about in part because of the increasing complexity of resource management and also because of the requirements of NEPA. It is intended to provide a conceptual framework for achieving operational planning and decisionmaking so as to include participants in all stages and levels of the planning and decisionmaking process and to improve communication linkages between and within organizational units of the Forest Service.

EXHIBIT H

Program Planning Process

	Development of Direction	Development of Forest Service Proposals	Reports and Target Responses
National	1. Propose National Direction for next 10-years based on <u>Framework for the Future</u>, <u>Presidential Objectives</u> and <u>Departmental Missions</u>, and Special Analyses <u>1/</u>. Develop instructions and format to request response from field. Send Request to Regional level.	6. Review subnational Program Proposals and recommended changes in National Direction. Negotiate with field units on important differences in Proposals to meet the Direction. Develop Phase II of the Environmental Program for the Future. Review with Department and other interested parties. Revise Phase II and transmit finished Program to Department. First year of Program provides Optimum level for Program Budget. Develop a Program Budget Proposal and transmit that Proposal to the Department. Negotiate with Department on Proposal.	7. Use Program for the Future to communicate Agency needs to OMB, Congress and Interest Groups. Send Program to Regions and Area. Department's Program Budget sent to OMB. Negotiate with OMB a proposal. Develop Chief's Program and Planning Advice and send to field. President's Budget presented to Congress. Congressional Appropriation. Allotment Letter (After appropriation sets up final attainment target initiating Program Attainment Reporting).
Regional/Area	2. Propose Regional or Area Direction for next 10-years based on Regional Framework for the Future, the <u>National Direction</u> and Special Analysis. Develop any extra instructions and format to request response from local level. (Nov.-mid-Dec.) Send request to local level	5. Review Forest Program Proposals and recommended changes in Direction. (March) Negotiate with forest on important differences in Proposals to meet the Direction. Develop Program Proposal for Region or Area and transmit to Washington Office along with recommended changes in National Direction. Negotiate with Washington Office on important differences in Proposal for meeting Direction.	8. Upon receipt of Program for the Future, Phase II, develop Regional as area version of Program. Use these Programs to communicate Forest Service Programs to interested parties. Respond to initial Attainment Targets in Chief's Program and Planning Advice. Develop and send Regional Planning Advice to Forest. Upon receipt of Allotment Letter, set up Program Attainment Reporting.
Local	3. Propose local Direction for next 10-years based on National and Regional or Area Direction and local capabilities. Next develop 5-year Program Proposals to best meet direction for 10-years.	4. Transmit Program Proposals with recommended changes in Regional Direction. Negotiate important differences in Proposals for meeting the Direction.	9. Respond to initial Attainment Targets in Planning Advice. Complete Work Plans. Set up Program Attainment Reporting.

1/ PAPTE Report, BARE Review, FRES Demand Analysis, etc.

SECRET

Category	Description	Remarks
1. General	The following information is being furnished to you for your information only. It is not to be used for any other purpose.	This information is being furnished to you for your information only. It is not to be used for any other purpose.
2. Specific	The following information is being furnished to you for your information only. It is not to be used for any other purpose.	This information is being furnished to you for your information only. It is not to be used for any other purpose.
3. Confidential	The following information is being furnished to you for your information only. It is not to be used for any other purpose.	This information is being furnished to you for your information only. It is not to be used for any other purpose.
4. Secret	The following information is being furnished to you for your information only. It is not to be used for any other purpose.	This information is being furnished to you for your information only. It is not to be used for any other purpose.

Key elements of the process are the incorporation of multi-disciplinary teams and the inclusion of the public throughout. This is intended to produce "unified decisions" which will serve as highly visible, well-accepted guidelines within which project managers can operate.

The "Unified Planning and Decisionmaking" process has as a primary purpose to be responsive to changing national priorities and concerns while recognizing that knowledge of the future is limited and that a multiplicity of viewpoints exist as to the desirability of alternative futures. Therefore, it is important to have a timely and coherent flow of information from which Forest Service managers can prepare future courses of action.

The process is intended to give close attention to immediate action decisions. This is because the flow of goods and services to people takes place as a result of day-to-day, year-to-year actions. By focusing management on current actions, the information needed for tomorrow's decisions will be available. Also, effective public involvement is dependent upon finding agreement on immediate courses of action.

The process attempts to be responsive to NEPA in that it commits the Forest Service to seeking public participation regarding all controversial actions so as to be able to evaluate alternatives. The problem still remains, however, for the Forest Service to resolve conflicts developing between public opinion and its legal and professional role as stipulated in the enabling legislation. This potential conflict is strongly affected by the problem of obtaining a full range of public interest brought into play. The above situation is often found in conflicts between local, regional and national interests.

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A separate but related concern is the need for the Forest Service to maintain internal communication. The cherished tradition of local control must be tempered by the understanding of the value of coordinated action. Exhibit I demonstrates the framework within which the planning and decisionmaking dialogue is supposed to flow, encompassing both long- and short-range decisions.

Of particular importance concerning the process is that the decision-making mainstream will deal with a whole range of topics that previously were handled independently. These topics include program plans, land use plans and environmental statements.

The process requires a continual development and transmission of information between levels in the form of planning studies and projects.

In general, they involve:

- (1) Monitoring existing flows and distribution of goods and services, including National Forest uses and users, to provide the basis for assessing program balance and equity to various interests and gauging management performance.
- (2) Estimating the potential social and economic effects of alternative organizational unit plans and programs and their correspondence with projected needs and demands.
- (3) Formulating an organizational unit's program alternatives and describing their estimated overall effects on people and resources to provide a basis for selection of courses of action that are feasible, equitable, and desirable.*

The above will require inputs from more specific resource, activity, research or special studies.

It should be noted that the Environmental Program for the Future previously mentioned and the FY 1975 Program Budget are the first efforts to apply the Unified Planning and Decisionmaking process and, as such, undoubtedly fall short of the goals and objectives previously summarized. The EPFF represents a long-range decision about future

*Unified Planning and Decisionmaking -- An Overview, June 21, 1973.

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(2) Estimating the potential social and economic effects of alternative organizational unit plans and programs and their correspondence with projected needs and demands.

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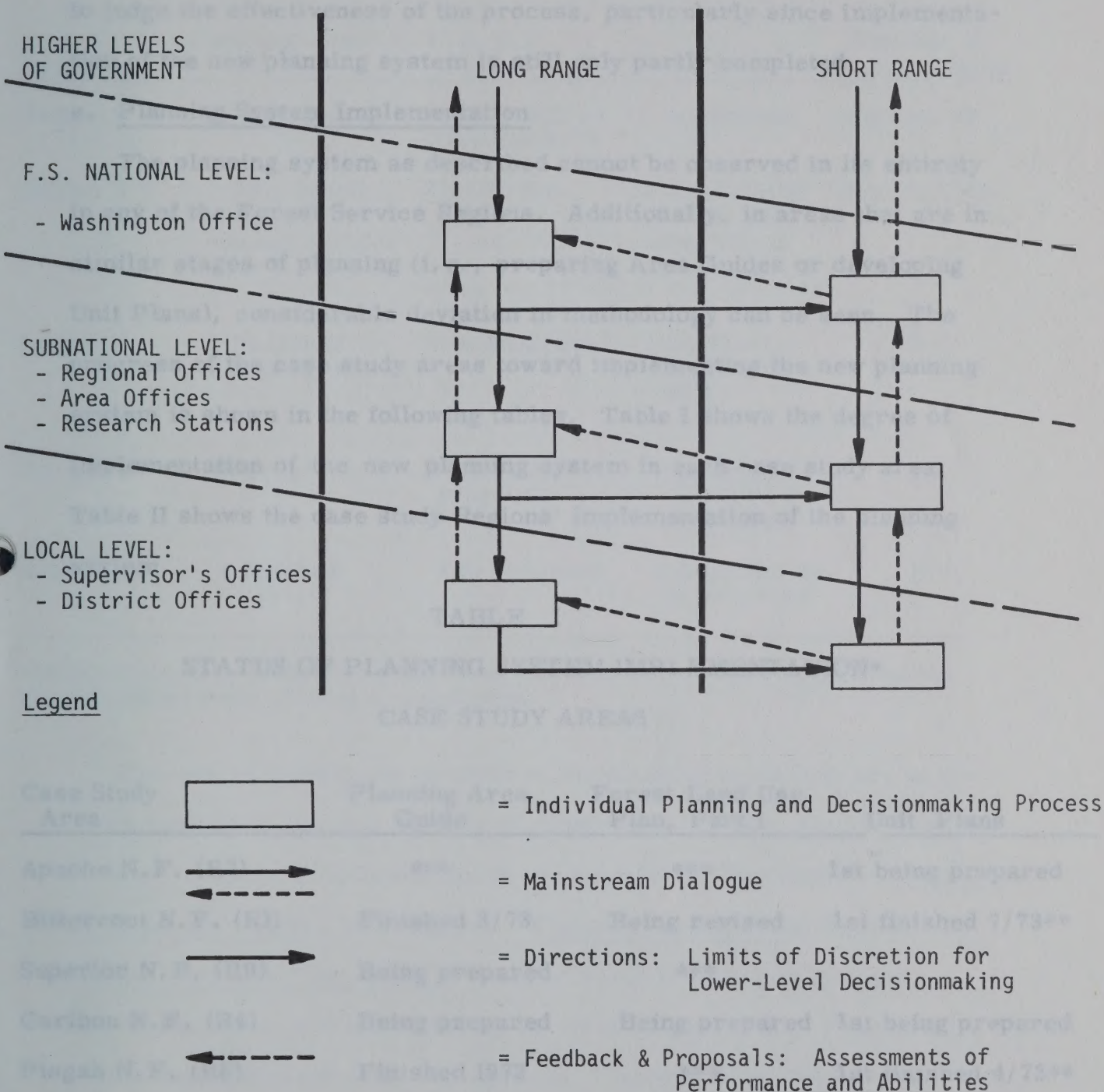
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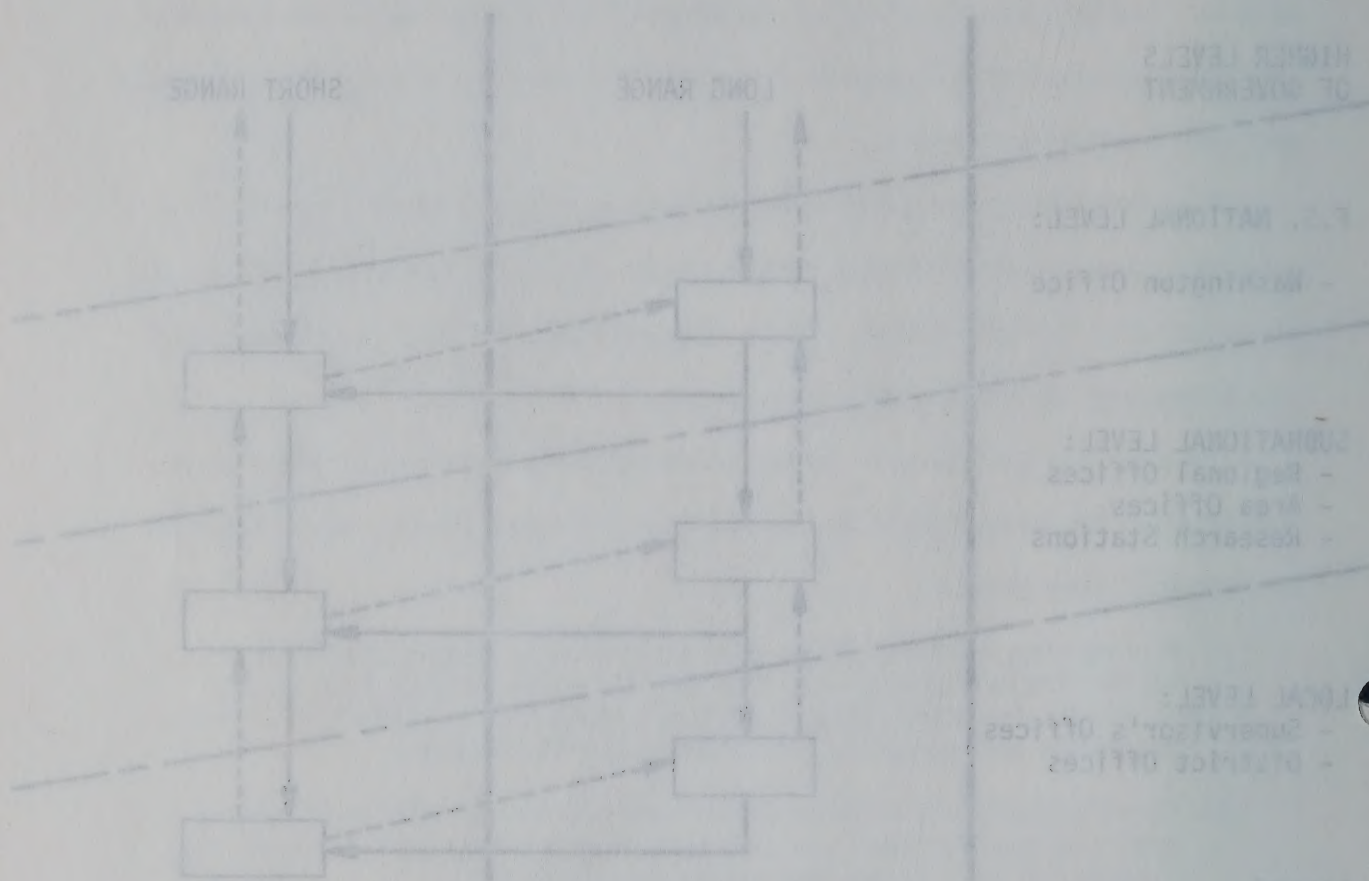
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UNIFIED PLANNING & DECISIONMAKING MAINSTREAM:MULTILEVEL DECISIONMAKING DIALOGUE

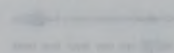
Note: For simplicity's sake, only three administrative units are represented--one at each of three organizational levels.

UNITED PLANNING & DECISIONMAKING MAINSTREAMING

MULTILEVEL DECISIONMAKING DIALOGUE



Legend



- Individual Planning and Decisionmaking Process
- Mainstream Dialogue
- Directions: Limits of Discretion for
Lower-Level Decisionmaking
- Feedback & Proposals: Assessments of
Performance and Abilities

Note: For simplicity's sake, only three administrative units are represented-- one at each of three organizational levels.

direction in the Forest Service. The short-range equivalent is the more specific FY 1975 Program Budget. It is not possible at this point in time to judge the effectiveness of the process, particularly since implementation of the new planning system is still only partly completed.

e. Planning System Implementation

The planning system as described cannot be observed in its entirety in any of the Forest Service Regions. Additionally, in areas that are in similar stages of planning (i.e., preparing Area Guides or developing Unit Plans), considerable deviation in methodology can be seen. The progress of the case study areas toward implementing the new planning system is shown in the following tables. Table I shows the degree of implementation of the new planning system in each case study area. Table II shows the case study Regions' implementation of the planning system.

TABLE I

STATUS OF PLANNING SYSTEM IMPLEMENTATION*

CASE STUDY AREAS

Case Study Area	Planning Area Guide	Forest Land Use Plan, Part I	Unit Plans
Apache N.F. (R3)	***	***	1st being prepared
Bitterroot N.F. (R1)	Finished 3/73	Being revised	1st finished 7/73**
Superior N.F. (R9)	Being prepared	***	
Caribou N.F. (R4)	Being prepared	Being prepared	1st being prepared
Pisgah N.F. (R8)	Finished 1972	***	1st finished 4/73**

*Only those Regions visited during case studies are included.

**Other unit plans have been completed and/or are being prepared.

***Using "old" Multiple Use planning documents.

direction in the Forest Service. The short-range equivalent is the more specific FY 1975 Program Budget. It is not possible at this point in time to judge the effectiveness of the process, particularly since implementation of the new planning system is still only partly completed.

e. Planning System Implementation

The planning system as described cannot be observed in its entirety in any of the Forest Service Regions. Additionally, in areas that are in similar stages of planning (i.e., preparing Area Guides or developing Unit Plans), considerable variation in methodology can be seen. The progress of the case study areas toward implementing the new planning system is shown in the following tables. Table I shows the degree of implementation of the new planning system in each case study area. Table II shows the case study regions' implementation of the planning system.

TABLE I
STATUS OF PLANNING SYSTEM IMPLEMENTATION
CASE STUDY AREAS

Case Study Area	Planning Area Guide	Forest Land Use Plan, Part I	Unit Plans
Apache N.F. (R3)	***	***	1st being prepared
Interoak N.F. (R3)	Finished 3/73	Being revised	1st finished 7/73**
Sequoia N.F. (R3)	Being prepared	***	***
Caribou N.F. (R4)	Being prepared	Being prepared	1st being prepared
Pacific N.F. (R3)	Finished 1/73	***	1st finished 4/73**

***Those Regions visited during case studies are included.
**Other unit plans have been completed and/or are being prepared.
***Using "old" Multiple Use planning documents.

TABLE II
REGIONAL IMPLEMENTATION OF THE NEW PLANNING SYSTEM*

Region	Planning Area Guides	F.L.U.P. Part 1	Unit Plans	Number of Planning Units
Region 3	1 PA finished	All (12) will be finished 2/74	12 in process	Approx. 80
Region 1	1 PAG (whole region) being revised for 3-5 PA's	All (16) finished	32 draft ER's; 9 final ES's; over 100 in progress	Approx. 200
Region 9	3 finished; 1 in progress;	6 in progress	1 finished; in progress N/A	N/A
Region 4	In progress	All (16) in progress	Approx 8 finished; 34 in progress	132
Region 8	4 finished	8 in progress	9 finished; 28 in progress	N/A

*Data obtained by telephone interview, January 1974. Only those regions visited during case studies are included.

The lack of a complete example of the planning system in any of the above regions is due to a number of constraints. First, the development of three levels of guidelines, goals and objectives (Washington - Framework for the Future, etc.; Region - Planning Area Guides; Forest - Forest Land Use Plan, Part I), each of which is based on the next hierarchal level, and subsequently the development of Unit Plans, is a time-consuming process. In addition, Planning Area Guides and Forest Land Use Plan (Part I) also require Environmental Statements (see Section B-3), lengthening the time it takes to produce the documents. Also, the level of planning previously accomplished under Multiple Use Planning in different regions varies significantly.

TABLE II

REGIONAL IMPLEMENTATION OF THE NEW PLANNING SYSTEM*

Region	Planning Area Status	F.L.U.P. Part I	Unit Plans	Number of Planning Units
Region 3	1 PA finished	All (12) will be finished 2/74	12 in process	Approx. 60
Region 1	1 PA (where region being revised for 3-6 PAs)	All (10) in process	32 draft ER's; 2 final ER's over 100 in process	Approx. 100
Region 2	3 finished; 1 in process	6 in process	1 finished; 1 in process N/A	N/A
Region 4	in process	All (10) in process	Approx 5 in process; 34 in process	122
Region 5	4 finished	8 in process	3 finished; 28 in process	N/A

*Data obtained by telephone interview, January 1974. Only those regions visited during case studies are included.

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Another constraint involves priorities. The Chief of the Forest Service expects land use planning to be completed on 75% of national forest lands by 1979. However, planning tasks vary depending on the needs of individual forests. Examples of this is the need for a Timber Management Plan where a timber program is controversial. In some areas, Land Use Management Plans have to be prepared for special areas prior to planning for the general forest. In these cases, plans are prepared for special areas because of controversial management practices.

The methodological variation among Regions is attributable to two situations. Some Regions have been traditionally weak in the old Multiple Use Planning. Regional staffs have therefore decided to prepare Area Guides and/or Forest Plans prior to initiation of Unit Planning. Other areas have had more sophisticated Multiple Use Plans and Regional Multiple Use Guides and were therefore better prepared to begin work on Unit Plans before or while the older documents were being updated.

The Washington Office guidelines, particularly ED-1, were quite broad, thus allowing a Regional decision as to where to institute the "new" planning system. The Washington office felt that "within the broad framework of this land use planning policy there is a wide range of opportunity for individual applications of planning efforts of varying intensity."*

It was felt that by allowing imagination and ingenuity to help develop specific procedures, a stronger planning methodology could be developed by incorporating the best procedures into the National guidelines. This can only come about however if an interchange of ideas between Regions occurs to help strengthen areas with weaker approaches.

*Cover letter, ED-1, Nov. 9, 1971.

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The disparity among the Regions and comments from Forest Service planners stating that they wanted more guidance indicate that the methodological exchange has not been as successful as anticipated. More specific information should be provided to help establish quality control for the outputs of the planning system. This should not be in the form of rigid directives since there are many unique situations that require variations in methodology. However, the need to provide analytical tools and evaluative criteria is evident in terms of the wide variation in product quality. Requiring each Forest staff to develop its own methodology is also time consuming and would seem to be inefficient given the many other tasks required of Forest Service personnel.

3. Environmental Analysis/Environmental Statement Process

a. General

The Environmental Analysis/Environmental Statement Process, as part of the Forest Service planning system, is the analysis and consideration of environmental aspects of proposed actions. The stated purpose of this process is to provide a means of giving environmental quality careful and appropriate consideration in the planning and decisionmaking process. It also provides a method for the public to inform the Forest Service of its needs and desires and gives the Forest Service a formalized procedure for informing and taking account of comments from other agencies, individuals, and groups having expertise or interest in the subject area under consideration. It is Forest Service policy that a decision on a proposed action will not be made until the environmental consequences are assessed in detail. If the action requires an ES, the entire process required by NEPA must be completed prior to approval of the action.

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The process is not an appendage to the planning system, or an additional task that is done if a particular situation warrants it. The environmental analysis and the Environmental Analysis Report have been integrated into the planning system and decisionmaking process to the extent that they are viewed by the Forest Service as being every day analytical tools. The Forest Service prepares Environmental Statements for the direction and guidance documents under which land and resource allocations are made. The primary land and resource allocation plan, the Unit Plan, also requires an Environmental Statement, as do the major programmatic plans. The Environmental Statement, therefore, is an integral part of the Forest Service planning system. Unfortunately, the ES format required by NEPA is not well suited to weigh environmental consequences of policy and guidance statements. This difficulty will be discussed further in the final section.

b. Environmental Analysis and Environmental Analysis Report

An environmental analysis (EA) and its documenting report (Environmental Analysis Report (EAR)) is made for all resource uses and activities and plans concerning or involving National Forest System lands, unless a decision to write an Environmental Statement (ES) has already been made. If an ES is planned, the Environmental Analysis is made as a part of the ES process (see Exhibit J). The objective of this procedure is to provide a working, planning and decisionmaking process that is responsive to both the Multiple Use/Sustained Yield Act and the National Environmental Policy Act. This system fulfills this objective by:

1. Making the planning process visible for review.
2. Providing an orderly assembly of information needed by the responsible official in decisionmaking.

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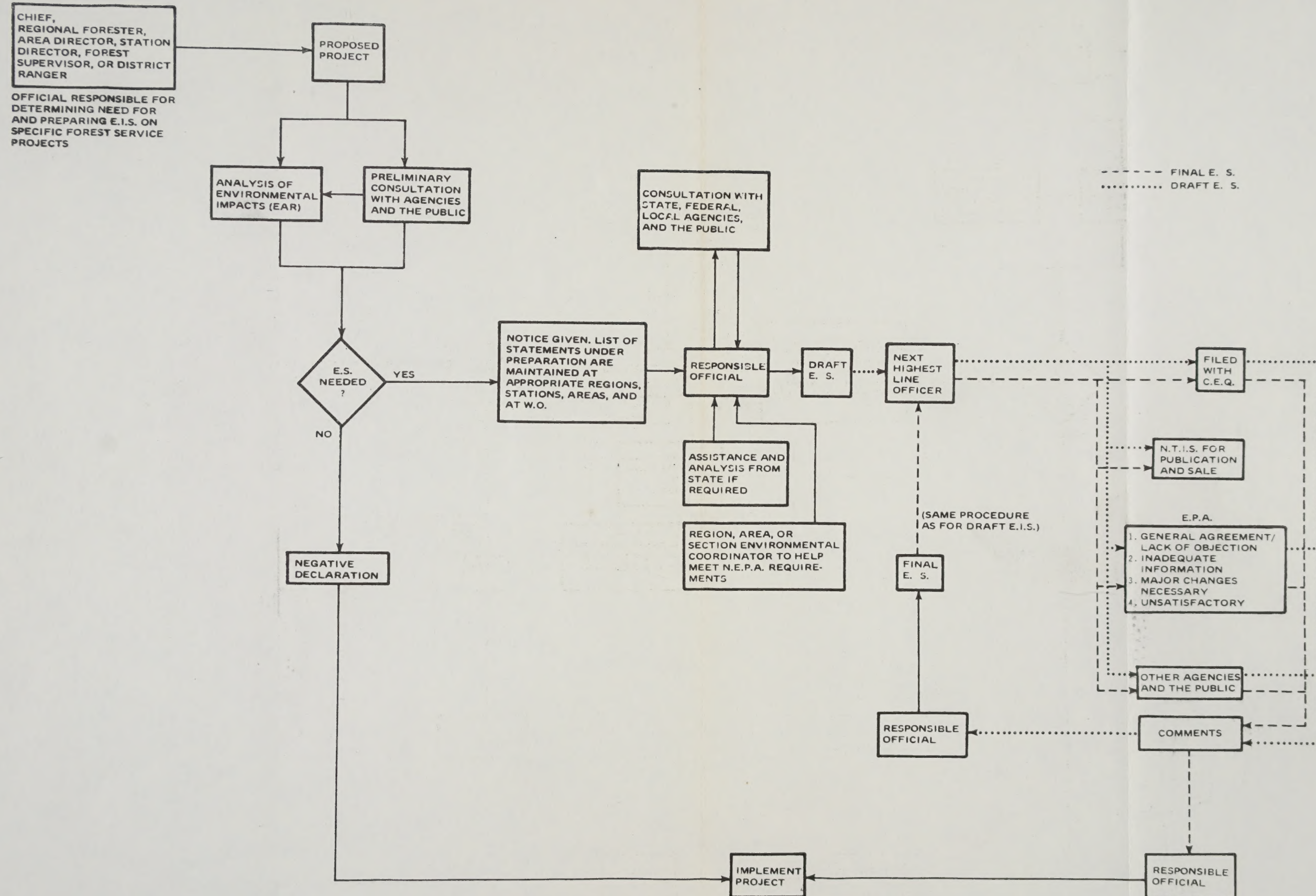
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U.S.F.S. E.S. PROCEDURE



3. Providing the basis for choosing a recommended plan from among the alternative plans.
4. Determining if those proposals which affect National Forest land are or can be made compatible with National Forest purposes and to define opportunities and needed coordination.
5. Providing the public and other agencies and groups with timely information on Forest Service findings.
6. Providing the basis for indicating the need of commenting on Environmental Statements, where needed.

Analysis begins when a firm proposal is made, a significant problem is identified, or when commencing planning within a Planning Unit. It may be land rather than project oriented depending upon the nature of the proposal and provides the basis for reaching management decisions.

Responsibility for preparing an Environmental Analysis Report will rest with the line officer responsible for approving the planning decisions or project plans.

The EAR follows the same outline as an Environmental Statement. When done completely and properly, an EAR can become the Environmental Statement if the Statement is necessary. Final plans and decisions concerning any project will be based on the Environmental Analysis Report.

c. Environmental Statements

The Forest Service Environmental Statement guidelines are included in the new Land Use Planning section of the Forest Service Manual under Title 8400. This document was essentially a rewrite of FSM 1940 undertaken in the summer of 1972, and published in May 1973. Title 8400 was amended in July 1973 and issued just prior to the CEQ Guidelines for Environmental Statements (August 1973). To insure compliance with

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the CEQ guidelines, 8400 underwent additional revision and was republished in December.*

All of the Forest Service line officers (Chief, Regional Forester, Forest Supervisor, District Ranger, Area Director, and Experiment Station Director) have the responsibility to determine the need for Environmental Statements. This delegation of decisionmaking to the various hierarchial levels of the Forest Service is appropriate since the officials at each level are responsible for specific phases of the total planning system.

If a statement is needed, the same official is responsible for preparing it. To insure that Environmental Statements do meet the requirements of NEPA, the Washington Office, Regions, Areas, and Stations have Environmental Coordinators.

The Forest Service requires Environmental Statements for actions which have major environmental impacts and/or are highly controversial.

The following criteria appear in FSM 8400 and are to be used as a means of determining the appropriateness of an Environmental Statement.

1. Degree of ecosystem disturbance; both onsite and offsite effects should be recognized. Offsite could involve effects on private land, such as triggering land development.
2. Irreversible effects on basic resources; short-term versus long-term commitments.
3. Cumulative effects of many small actions.
4. Chain reactions or secondary effects of interrelated activities.
5. National versus regional and local importance.

*FSM 8400, Oct. 19, 1973 (preliminary revised draft). The cover letter of this revision of FSM 8400 makes the following statement concerning the reason for the revision: "Although CEQ had indicated our existing instructions meet the guidelines in all important respects, we believe it would be best to publish an updated version, rather than rely on the instructions published in the Federal Register on August 6."

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6. Uniqueness or rareness of resource.
7. Scope of anticipated public involvement and controversy anticipated.

The only criterion given to help determine whether or not an action should be considered "major" is that the size or scope of an action is a factor that may be considered.

The guidelines do state the some actions will "normally require" Environmental Statements. These are:

1. Area Guides.
2. Forest Coordinating Requirements and/or Forest Land Use Plan.
3. Unit Plans.
4. Timber management plans including timber sale action plan.
5. All activities in roadless areas not otherwise thoroughly covered by a timely environmental statement on a Unit Plan for the roadless area (the preceding has no bearing upon the statutory rights of ingress and egress to private lands).
6. All new ski areas where significant construction has not yet been accomplished. Also, expansion at existing ski areas which involves extension of the present special use boundary.
7. Programs or projects involving use of pesticides.

In all other actions, an EAR is required to determine the need for an Environmental Statement. If the environment is found to be significantly affected, an Environmental Statement will be written.

It is questionable whether or not an ES is appropriate for Area Guides and Forest Plans (Part I). Both documents tend to deal in broad generalizations in providing management and coordinating requirements. They also provide direction for reducing environmental impacts by defining management constraints. They are not, however, "action documents" that make basic land use and resource allocations, nor are they specific enough to address completely all environmental issues in such large areas.

6. Guidelines or processes of resources.

7. Scope of anticipated public involvement and controversy anticipated.

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6. All new ski areas where significant construction has not yet been accomplished. Also, expansion of existing ski areas which involves extension of the present special use boundary.

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In all other actions, an EIS is required to determine the need for an

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A main concern of the Forest Service is to involve the public at the Regional and Forest levels and make the public aware of the general programs at these levels. Instead of doing this through the ES process, some Regions have elected to use the EAR process to introduce public involvement.

The Forest Service also considers specific environmental settings in their ES requirements. The Forest Service guidelines state that in most cases, any activity that will significantly affect the following will require an Environmental Statement:

1. Formally classified areas, such as Wilderness Areas, Primitive Areas, wild and Scenic Rivers, National Recreation Areas, Natural Areas, Scenic Areas, Historical Areas, Archeological Areas, Geological Areas and National Trails. Also areas being considered or with significant potential for classification.
2. Adjacent National Parks and monuments, wildlife refuges, or similar State and locally designated areas.
3. Scenic attractions.
4. Municipal watersheds.
5. Shorelines.
6. Free-flowing streams.
7. Rare and endangered species -- plants or animals.
8. Key wildlife or fish areas.
9. Wetlands or estuaries.
10. Air and water quality. (This should include not only quality in terms of legal standards, but aspects for which standards may not be set.)

Title 8400 also gives another list of activities that could significantly affect the environment and require an Environmental Statement. These are:

1. Other resource plans.
2. Rural area development feasibility studies and proposals.

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The Forest Service also considers specific environmental settings in their EIS requirements. The Forest Service guidelines state that in most cases, any activity that will significantly affect the following will require an Environmental Statement:

1. Formerly classified areas, such as Wilderness Areas, Prime-Use Areas, Wild and Scenic Rivers, National Recreation Areas, National Antiquities Areas, Historical Areas, Archeological Areas, Geographical Areas and National Trails. Also areas being considered or with significant potential for classification.
2. Adjacent National Parks and monuments, wildlife refuges, or similar State and locally designated areas.
3. Scenic attractions.
4. Municipal watersheds.
5. Shorelines.
6. Free-flowing streams.
7. Rare and endangered species -- plants or animals.
8. Key wildlife or fish areas.
9. Wetlands or estuaries.
10. Air and water quality. (This should include not only quality in terms of legal standards, but aspects for which standards may not be set.)

Title 3600 also gives another list of activities that could significantly affect the environment and require an Environmental Statement. These are:

1. Other resource plans.
2. Rural area development feasibility studies and proposals.

3. Mining permits and certain prospecting permits. This applies to minerals owned by the United States. May also apply to certain aspects of removal or reserved minerals (such as operating plans of mineral operator).

a. Surface mining.

b. Deep mining.

c. Development of major oil and gas fields with appurtenant facilities.

4. Major public service developments (for example, resorts and marinas).

5. Programs involving the use of fertilizers and other chemicals.

6. Water resources development projects.

7. Channel alteration projects.

8. Continuing National Cooperative programs.

9. Cooperative state program plans.

10. Large-scale, on-the-ground research activities, such as drastic treatment of sizeable areas.

11. Vegetative-type conversion involving substantial acreage.

12. Transportation construction programs.

13. Major highways and bridges if not included under item 14.

14. Prescribed burning program if not included under 2.

15. Rights-of-way permits for major transmission lines.

16. Major sewage treatment facilities.

17. Major acquisition or exchange.

18. Follow-up actions associated with natural disasters.

19. Issuance of certain grazing permits.

20. Off-road vehicle use plans.

The three lists of activities cover almost all activities that the Forest Service could conceivably undertake, and either requires an Environmental Statement or the consideration of a Statement for each. Individual actions

3. Mining not under and certain prospecting permits. This applies to minerals owned by the United States. May also apply to certain aspects of removal or reserved minerals (such as operating plans of mineral resources).

a. Surface mining.

b. Deep mining.

c. Development of major oil and gas fields with significant facilities.

4. Major public service developments (for example, reservoirs and powerhouses).

5. Programs involving the use of fertilizers and other chemicals.

6. Water resources development projects.

7. Channel alteration projects.

8. Continuing National Cooperative programs.

9. Cooperative state program plans.

10. Large-scale, on-the-ground research activities, such as those in the field of air quality.

11. Vegetative-type conservation involving substantial acreage.

12. Transportation construction projects.

13. Major highways and bridges if not included under item 12.

14. Prescribed burning program if not included under 12.

15. Right-of-way permits for major transmission lines.

16. Major sewage treatment facilities.

17. Major acquisition or exchange.

18. Follow-up actions associated with natural disasters.

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The three lists of activities cover almost all activities that the Forest

Service could conceivably undertake, and either requires an Environmental

Statement or the completion of a Statement for each. Individual actions

that are covered by a programmatic statement are excluded from the Environmental Statement requirements.

Three types of program statements exist to analyze the impacts of groups of actions. A Generic Statement is used for an activity that is repeated in the same "environmental setting." This would include yearly projects such as forest pest suppression spraying, etc.

An Umbrella Statement might be used for long term programs, such as a timber management plan for a 10-year period. Program Statements are proposed to cover groups of specific projects. Each individual action covered by the three types of program statements would require an EAR.

Forest Service Environmental Statements, as outlined in FSM 8400, contain the following information:

1. Description.
2. Environmental impacts.
3. Summary of probable adverse environmental effects which cannot be avoided.
4. Relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity.
5. Irreversible and irretrievable commitment of resources.
6. Alternatives to the proposed action.
7. Consultation with appropriate federal agencies and review by state and local agencies developing and enforcing environmental standards.

"Description" refers to a description of the proposed action, its purpose, its social, economic and environmental objectives. The existing environment (inventory) is also included.

In most of the case study ES's, the inventory phase was inadequate in a number of areas, and almost always with regard to the social and economic

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sectors of the environment. Usually Forests and Ranger Districts do not have sociologists and economists on their staffs and have to borrow them from elsewhere or utilize outside consultants. In some Regions, the orientation toward resources, especially timber, is still dominant over the total interdisciplinary approach to planning. This usually results in an ES heavily biased in terms of timber production.

Often the "present environment" section also fails to point out the historical evolution of the existing environment. For example, the mixed species, non-climax type of forest of today with its associated diverse wildlife habitat is an environmental setting that many people value and want to preserve. This environment, however, is the result of short-term negative impacts associated with previous timber harvesting and fires.

The environmental impacts to be discussed are supposed to include both favorable and adverse impacts as they affect both the local and regional setting. This refers to the natural, social, and economic environment. Both primary and secondary impacts require analysis, as well as mitigation measures that will minimize any negative impacts. In summarizing adverse impacts which cannot be avoided, an explanation is also needed as to why they cannot be avoided.

Most of the Forest Service Environmental Statements observed were fairly comprehensive in listing negative impacts. However, the discussion and analysis of the impacts was often overly brief. Secondary and cumulative impacts were rarely discussed. Magnitude of the individual impact versus the overall importance of the impact to the action was usually not addressed. In addition, the discussion of favorable impacts was usually negligible. This is also true of the section pertaining to

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"short-term" uses of the environment and the maintenance and enhancement of long-term productivity. For example, many of the negative environmental impacts associated with timber cutting are short term in nature. The negative impacts are generally followed over the long-term by favorable environmental effects if proper reforestation and silvicultural practices are followed.

The impact sections usually failed to highlight important local differences that would substantially affect the degree of adversity anticipated. For example, the clear cut areas of Superior National Forest are relatively small and mostly invisible because of the flat terrain. The scars of the Bitterroot Forest, which are visible, are the result of excessive clearcutting and of fire and pests. Thus, the intensity and location of use is critical in terms of degree of negativity and length of time the adverse impacts remain. These concepts were seldom observed in the case study Forest Service Environmental Statements.

The ES is required to identify logical alternative proposals and an analysis of each should be made. This should include benefit-cost comparisons and impacts on the environment. The following examples are types of alternatives that are supposed to be considered:

- a. The alternative of taking no action.
- b. Alternatives requiring actions of a significantly different nature which would provide similar benefits with different environmental impacts.
- c. Alternatives related to different designs or details of the proposed action which would present different environmental impacts.

All alternatives that are reasonable, including those not within the authority of the Forest Service to implement should be discussed.

Most of the ES's that were observed during the case studies concerned land allocation. All of the Unit Plan ES's stressed resources

"short-term" uses of the environment and the maintenance and enhancement of long-term productivity. For example, many of the negative environmental impacts associated with timber cutting are short-term in nature. The negative impacts are generally followed over the long-term by favorable environmental effects if proper reforestation and silvicultural practices are followed.

The impact sections usually failed to highlight important local differences that would substantially affect the degree of adversity anticipated. For example, the clear cut areas of Superior National Forest are relatively small and mostly invisible because of the flat terrain. The scars of the Bitterroot Forest, which are visible, are the result of excessive clearcutting and of fire and pests. Thus, the intensity and location of use is critical in terms of degree of negativity and length of time the adverse impacts remain. These concepts were seldom observed in the case study Forest Service Environmental Statements. The ES is required to identify logical alternative proposals and an analysis of each should be made. This should include health-cost comparisons and impacts on the environment. The following examples are types of alternatives that are supposed to be considered:

- a. The alternative of taking no action.
- b. Alternatives requiring actions of a significantly different nature which would provide similar benefits with different environmental impacts.
- c. Alternatives related to different designs or details of the proposed action which would prevent different environmental impacts.

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however, either emphasizing different utilization (or non-utilization) locations, or different sizes of resource management areas. In these cases the alternatives are limited and tend to justify the proposed action. In addition, alternatives tend to be limited by Forest Service legal constraints or past practices. Only one case study ES looked at alternative methods of planning before looking at management objectives. In most cases however, no Forest Plan (Part I) had been prepared. Generally, management emphasis should be included in the Forest Plans.

In some of the plans, complete compliance with the guidelines for alternatives does not seem feasible. This is primarily true of Timber Management Plans, areas with unique land tenure patterns, and areas that are governed by unique laws.

Forest Service personnel have made the following observation concerning the "no action" alternative and compliance with the Multiple Use/Sustained Yield Act in Timber Management Plans. "To exclude all timber harvest is not consistent with good forest, wildlife or watershed management, and would prevent the application of silvicultural treatment within the framework of management objectives of the forest." Generally, the primary reason for the inconsistent quality of many ES's is that Forest Service personnel are still undergoing a "learning process" for ES preparation.

In addition, each Region has tended to develop its own approach to structure and content. As a result there have been some very interesting and enlightening approaches to the problem. Taking account of the experience gained, it is now necessary to make a thorough review of the methodologies so as to improve upon the overall quality. The resulting guidelines

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should not be considered as rigid. One of the main purposes could be to provide a consistency in document content so as to reduce the delays of processing and review. Perhaps more important, these guidelines would assist the implementation of the planning process, particularly with regard to Forest and Unit Plans.

It primarily covered procedural and policy information and presented a number of unanswered questions and significant issues concerning the planning, resource management and decision making processes of the Forest Service. The resolution of these questions and issues represented case study work in the field.

The objective of the case studies is to provide supplemental information for the evaluation of the influence of NEPA on the decision making process of the Forest Service. Data gathered from the case studies track the decisionmaking process and identify the stages at which environmental issues were incorporated into the land use planning system. Each case study analyzes the action, its resource and management objectives, issues and related problems, the role of the EIR and EIS, and the resultant action.

Case study nominations were selected by the Washington Office of the Forest Service and submitted to CEQ for consideration. The six final case studies represent actions which meet the following criteria:

1. reflect normal, rather than unique, field operations of the agency;
2. represent typical, but significant examples of land use/resource management actions;

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C. CASE STUDIES

At the outset of the NEPA Process Study, VTN staff members reviewed pertinent Forest Service Manuals, directives, instructions, etc. in order to attain a working knowledge of the agency's systems and operation. This initial review was acknowledged to be limited, since it primarily covered procedural and static information and produced a number of unanswered questions and significant issues concerning the planning, resource management and decision making processes of the Forest Service. The resolution of these questions and issues necessitated case study work in the field.

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criteria:

1. reflect normal, rather than unique, field operations of the agency;
2. represent typical, but significant examples of land use/resource management actions;

3. Represent a cross section of Forest Service land types and geographic coverage (See Exhibit K);
4. have adequate data and information available;
5. involve areas of land with multiple land use and resource management alternatives, from which issues and conflicts require identification and employment of multiple-use decision factors;
6. have a level of significance that can be related to NEPA requirements and objectives.

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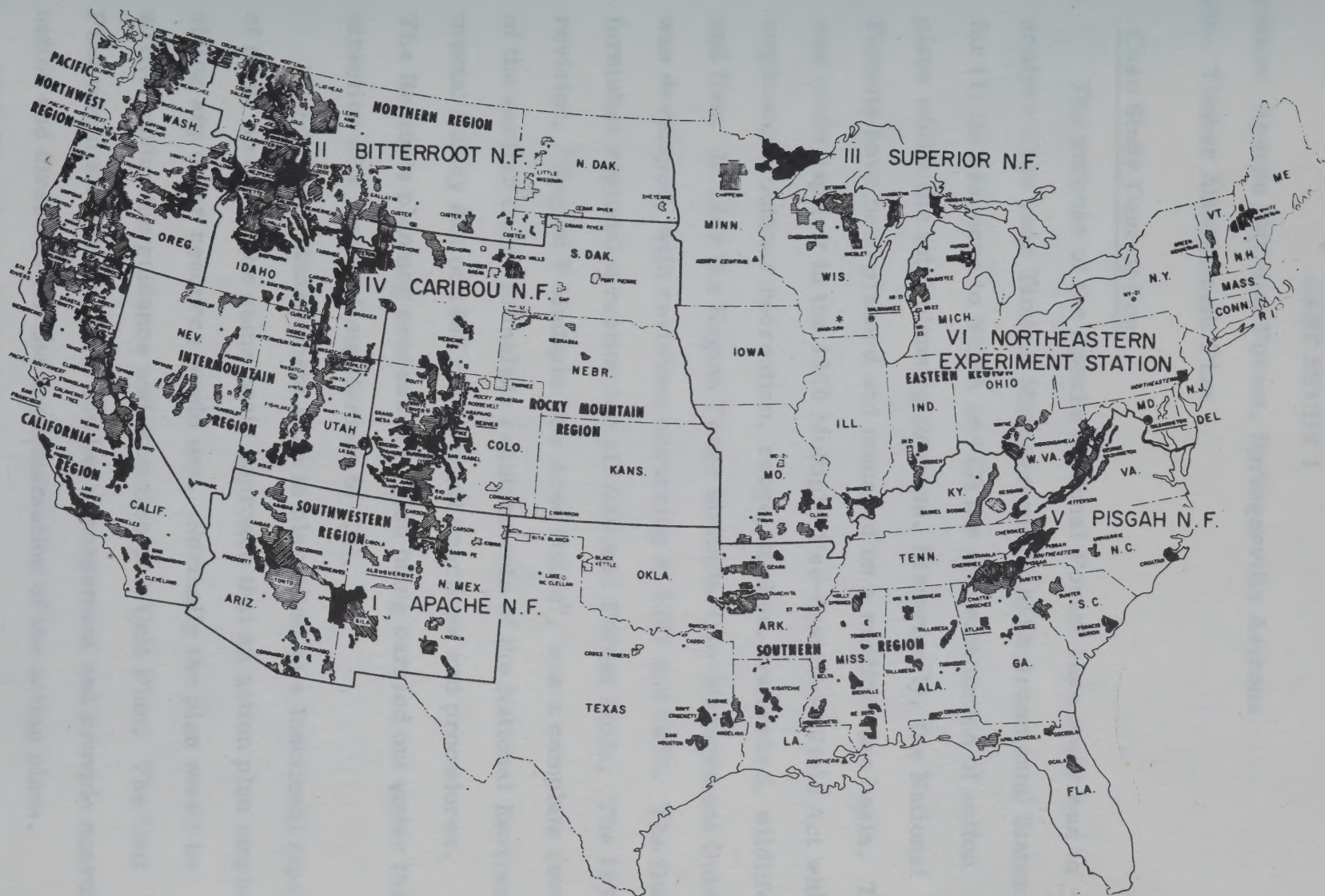
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CASE STUDY AREAS

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CAST STUDY I

Location: Apache National Forest, Springerville Arizona

Topic: Timber Management Plan

1. Case Study Description

The purpose of the Apache National Forest case study was to analyze a ten year Timber Management Plan/ Environmental Statement for (1) its response to NEPA and (2) the implementation of action plans within the total planning process. Historically, the National Forests have been planned and managed on a multiple use basis. This was made explicit in the 1960 Multiple-Use-Sustained Yield Act which emphasized outdoor recreation, range, timber, watershed, wildlife and fish. In 1959 the Region Three Multiple-Use-Management Guide was developed, with revisions occurring in 1967 and 1972. The Guide furnishes regional direction for all National Forest lands. The 1972 revision, "Region 3 Multiple Use Area Guide", was a complete revision of the earlier Guide to include requirements of the National Environmental Policy Act of 1969 and current practices and procedures. The Region's planning procedure is also being carried out under the direction of a Regional supplement to EDI.

The Timber Management Plan is classified as a functional type of plan, and uses the same basic approach that an action plan emphasizing any other resource would use. Normally the plan would be written under the guidance and direction of a Unit Plan. The Unit Plan would allocate land for Timber Management and provide coordination and direction for the implementation of the action plans.

Unit Planning is just beginning on the Apache National Forest, however. Development of the Timber Management Plan/ ES was given

CASE STUDY I

Location: Apache National Forest, Fort Huachuca, Arizona

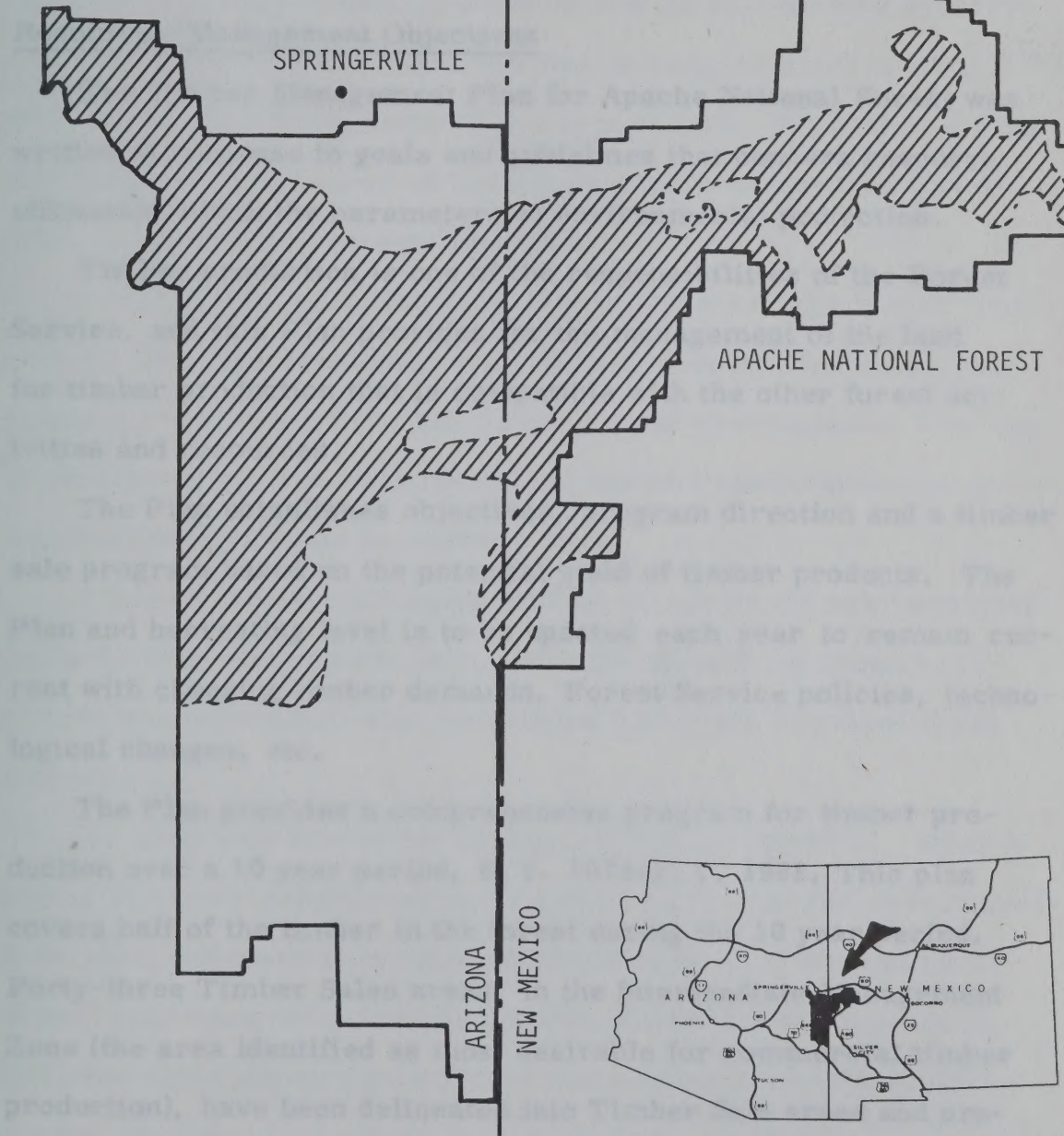
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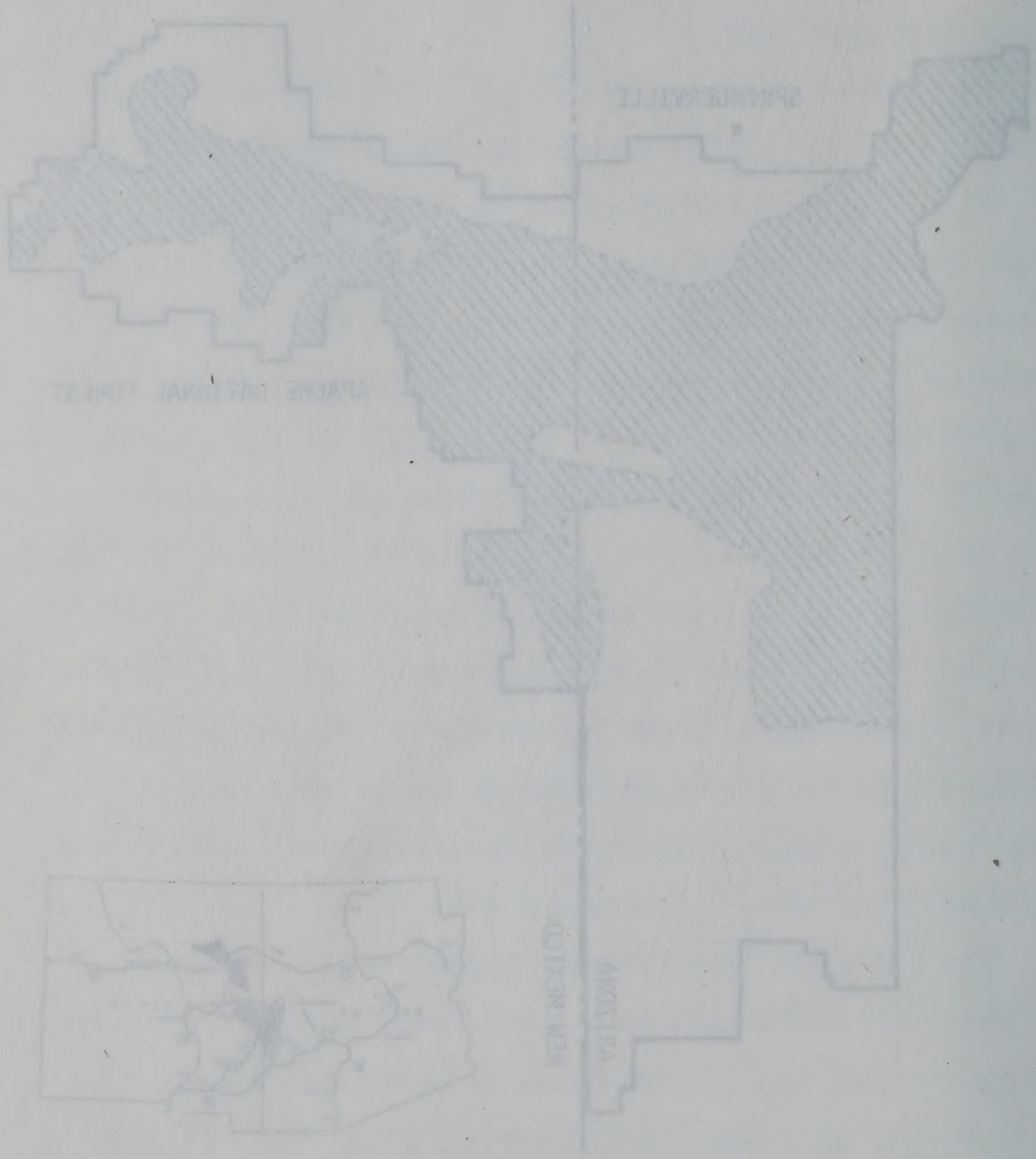
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CASE STUDY I - APACHE NATIONAL FOREST

Great priority due to the uncertainty over proposed timber sales and to the enactment of NEPA during the plan development stage. The Unit Plan therefore, had been prepared at the time of this study.



INTERMEDIATE FOREST ZONE



INTERMEDIATE FOREST ZONE

first priority due to the controversy over proposed timber sales and to the enactment of NEPA during the plan development stage. No Unit Plans therefore, had been prepared at the time of this case study.

2. Resources/Management Objectives

The Timber Management Plan for Apache National Forest was written in response to goals and guidelines that concern resource utilization within the parameters of environmental protection.

Timber production is one of the responsibilities of the Forest Service, and this Plan provides for the management of the land for timber production that is compatible with the other forest activities and resources.

The Plan establishes objectives, program direction and a timber sale program based on the potential yield of timber products. The Plan and harvesting level is to be updated each year to remain current with changing timber demands, Forest Service policies, technological changes, etc.

The Plan provides a comprehensive program for timber production over a 10 year period, F.Y. 1974-F.Y. 1983. This plan covers half of the timber in the forest during the 10 year period. Forty-three Timber Sales areas, in the Intermediate Management Zone (the area identified as most desirable for commercial timber production), have been delineated into Timber Sale areas and programmed for production during the 10 year period. When this 10 year program is finished another 10 year plan will be provided that will incorporate new timber sale units and areas that have

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recently undergone cutting. In 20 years, probably under the guidelines of a third plan, the F.Y. 74-83 Sales areas will again be cut in accordance with the silviculture prescriptions that have been derived for the present Timber Sale Program. It should be noted that this long range planning approach is a direct response to NEPA.

The Timber Management Plan was actually initiated in early 1970, when an interim Management Plan was prepared. This Interim Plan was based on an inventory of timber resources that was started in 1961, and completed several years later.

In early 1971, a Multiple Use Survey Report (Stage 1) was completed. This was essentially a feasibility study of the Timber Management Plan, and did contain environmental investigation. This type of report was written when the Forest Service was proposing projects that they thought would be controversial.

A Stage 2 Timber Management Plan (rough draft) was completed in June, 1972, but in December, 1972 the Stage 1 and Stage 2 procedure was terminated when the Region 3 Multiple Use Area Guide was issued.

The Plan was sent to the Regional Office for approval. After a period of review and discussion by both the Regional and Forest staffs a decision was made to prepare an Environmental Statement on the Plan. This decision corresponded with Forest Service desires to integrate their planning procedures more fully with NEPA requirements.

The proposed Timber Management Plan was prepared as a part of an Environmental Statement reflecting the revised planning guidelines in the Multiple Use Area Guide. The draft Environmental Statement was completed in March, 1973.

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The Forest staff originally hoped that, because of time and budgeting constraints, the "new" Environmental Statement procedure would be a matter of re-writing already available information. A copy of an Environmental Statement for Coconino National Forest was obtained and used as an outline. Assistance was obtained from the Regional Office for the writing of this draft Statement. Timber sale area descriptions for a ten-year period and "thumbnail sketches of impacts" were obtained from the Ranger Districts. The first attempt at creating alternatives was viewed as simply being silviculture management modifications. The Statement was reviewed and revised by Forest Service specialists in the fields of wildlife, soils, hydrology, recreation, and grazing.

The Statement was then reviewed by the Forest Supervisor and Regional Environmental Coordinator. This resulted in some reorganization and revisions. The Watts Timber Sale (a controversial action within the framework of the total plan) was also included in detail at this stage. The Environmental Statement was then forwarded to the Washington Office for approval and circulation.

On March 30, 1973, the document was released to the public (200 copies were sent to respondents to past Environmental Statements, the Watts Sale, and also to other government agencies). A public meeting was held in mid May that was attended by approximately 100 people. Written and oral comments were requested and 140 were received, of which over 60 were concerned with the proposed Watts Sale. At about this point in time a letter, written by a "concerned resident" was sent to Russell Train, Chairman of C.E.Q., to E.P.A.,

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the Forest Service Regional Office and to members of Congress complaining about Forest Service policy regarding Timber harvesting. This letter was primarily a response to the proposed Watts Sale. Partly as a result of the mounting controversy and also due to the similarity of this situation to other Forest Service areas a C.E.Q. staff member made an "on-site" review of the Timber Management Plan. After reviewing the Timber Management Program and the proposed Watts Timber Sale area, the CEQ staff representative provided the Forest Supervisor with a through review and a model outline for Timber Management Plan Environmental Statements.

The final Environmental Statement was then prepared in a form that was an extensive modification of the Draft Statement. Many of the modifications of the text are a result of the "public involvement process."

One requested change was that a separate Environmental Statement be prepared for the Watts sale. This request was reviewed at all levels within the Forest Service and finally rejected because of the impact that decision would make.

The Forest Service feels that Environmental Statements should not be required for individual actions which fall within the parameters of an approved Resource Management Plan. In this case, they have prepared an Environmental Statement which serves as the Timber Management Plan for the Apache National Forest for the next ten years. They do not feel it necessary to prepare Environmental Statements on individual timber sales. However, the Forest Service requires that Environmental Analysis Report be prepared for each sale.

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3. Issues and Problems

The Apache National Forest lands that have been designated for timber sales are in the Intermediate Management Zone. This is a pre-NEPA, old planning system management area that is designated for commercial timber production. This area does not have the benefit of having land uses designated by Unit Plans, which would have analyzed land use alternatives, and indicated specific timber management areas based on an analysis of environmental considerations.

The decision to prepare the Timber Management Plan/ES prior to Unit Planning was necessitated by controversy over timber harvesting that could have, through law suits, stopped this activity until an Environmental Statement was produced for each timber sale to be advertised. A principal issue is the method to be utilized by the Forest Service to determine where to harvest timber, and under what constraints. The problem of deciding if timber harvesting is compatible with wilderness and primitive objectives is a part of the controversy associated with the Watts Timber Sale.

A second but related issue is the conflict between local, regional and national public desires. The Forest Service cannot by itself resolve this problem. However it can clarify these conflicts through the ES public involvement process.

Much of the public criticism of the plan is directed at the negative environmental impacts that will be caused by timber harvesting. There are three sections in the Environmental Statement that deal with environmental impacts; Section III, Environmental Impacts of the Plan, Section

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IV, Adverse Environmental Effects Which Cannot be Avoided, and Section V, Coordinating and Mitigating Measures. In addition, Section II, Timber Sale Program FY 1974-FY 1983 contains a brief description of the elements of the environment that will be affected. The final ES includes primarily negative impacts. Positive impacts, recommended by F.S.M. 8400 dated May, 1973, were not included in a summary form and were not included within the sections discussing impacts although included in the Draft ES.

The proposed Timber Management Program will affect all resources and uses within the Apache National Forest. Some of the activities and uses will benefit from timber harvesting, and many adverse impacts will be temporary in nature. A concerned citizen, reading only about negative environmental impacts, could easily draw the conclusion that timber harvesting would possibly eliminate wildlife from a good part of the forest. The ES can do much to enlighten readers and clarify issues regarding the impact of cutting timber by addressing positive impacts.

It's a generally accepted fact that the public, protesting actions, is "under educated". In other words, people are against an action or program without being aware of all the ramifications of the action. Bulky reports, such as the Apache National Forest ES are generally not read completely. It is important for of the Forest Service to educate the public about the Services' various actions as well as to be responsive to the public needs. This responsibility is recognized, but more work is required to inform the public on forest management objectives and the subsequent benefits to the forest in general. This can only be

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implemented by additional public meetings and involvement and more use of the news media.

There have been many comments about timing of the E.A.R. and the lack of an ES for each timber sale. Limits must be recognized concerning the level of activity requiring an ES. An ES seems logical for a program such as the 10 year Timber Management Plan, but not on individual components of the program. An E.A.R. on individual timber sales should suffice after an ES has been prepared and approved on the Timber Management Plan. The Forest Service can not realistically provide detailed information, compartment examinations, etc., for areas that will not be utilized for 10 years. However public involvement must occur so as to reach a basic level of understanding and concurrence regarding timber harvesting and timber management.

Guidelines to aid in deciding when to write an Environmental Statement need clarification. Where a project will have a major environmental impact on the environment or will be controversial, the responsible officer is required to prepare an Environmental Statement. In the case of the Apache National Forest, this was a "gut decision". The regional staff has assisted the forest staff in these decisions. However there does not seem to be any clear definition of "major". "Controversy" usually is synonymous with pressure from environmental groups. A good example is the controversy associated with the Watts timber sale.

The inexperience of the Apache National Forest staff in preparing ES's, and the lack of higher level direction resulted in substantial modification of the Draft and Final ES's prepared for the Timber Management Plan. Controversy associated with some of the proposed timber sales made the job of writing the ES difficult. However, the

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The major effects that NEPA has had on the Apache National Forest staff have been changes in types of personnel, and time constraints. NEPA requires that "the analysis supporting an environmental statement should utilize a systematic, interdisciplinary approach integrating the natural and social sciences and the environmental design arts in planning and in decision-making." To accomplish this, the Apache National Forest now has specialists in such fields as soils, hydrology, wildlife management, engineering, landscape architecture, resource management, and recreation. Although these are not all new positions, some new staff members have had to be added and some doubling of responsibility was necessary.

All proposed projects now need a longer period of time between the proposal and implementation stages. This extra time is needed in the planning stages including resource inventory, environmental description, impact analysis, coordination and discussion with the public, and report writing.

It has already been shown how much time was required for the Timber Management Plan. Presumably other Environmental Statements might have to be written for other types of resources uses

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within the area covered by the Timber Management Plan. Planning Units will also have Environmental Statements written for them.

The Barometer Watershed Planning Unit, for which basic resource data is now being evaluated, has approximately 90% of its area covered by all or parts of 14 timber sale areas contained in the Timber Management Plan. The Final Environmental Statement is scheduled for release in July, 1974. Planning and report writing (specially Environmental Impact Statements) for this particular unit will have taken several years, which seems to be an extraordinary length of time and considerable work duplication. Some members of the public believe that Environmental Statements should be made for all actions such as Timber Sales. If the Forest Service were to incorporate this suggestion into their planning procedures they would have to expand their staff substantially or reduce other activities still further in order to meet ES requirements.

4. Role of EAR/ ES

The Draft ES was prepared in accordance with new Forest Service requirements (in response to NEPA) including a thorough resource analysis and the weighing and balancing of resource uses by an interdisciplinary team. Several alternative actions, including "no action" were weighed for 43 proposal timber sale areas to be utilized over a 10-year period. However the alternative section tended to be weak in that basic alternative uses other than timber harvesting and management were not really addressed in such a way as to resolve the issues causing much of the controversy.

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The purpose of the Environmental Statement on the Timber Management Plan and the Plan itself was to evaluate a ten year Timber Management Program and the essential elements of a Timber Management Plan for the period July 1, 1973 through June 30, 1983 for the Apache National Forest. The objective was to give careful and appropriate consideration in the decision making process to environmental quality.

The evaluation of environmental impacts, with accompanying public participation was used by the Forest Service to select management alternatives that represented a logical approach to timber management. The E.S. describes in detail environmental impacts, management requirements and constraints, and specific mitigations of adverse environmental impacts. Once the Timber Management Plan is adopted, each timber sale that is presented in the ten year plan will be evaluated by an E.A.R. approximately 2 years prior to the sale. The E.A.R. is compiled by a District Ranger with assistance from the interdisciplinary team.

5. Resultant Action

No action has been taken on the Timber Management Plan/ES. The document has been submitted to CEQ, and the waiting period for final comments has elapsed. The Apache National Forest Staff is waiting for information from higher levels as to whether the document can be implemented as a plan.

When the Timber Management Plan is implemented, the NEPA process will continue to influence it in the future. Prior to an action such as a timber sale occurring, an Environmental Analysis Report will be made to confirm that the sale remains within environmental protection guidelines.

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5. Resistant Action

No action has been taken on the Timber Management Plan/ES. The document has been submitted to CEC, and the waiting period for final comments has elapsed. The Apache National Forest staff is waiting for information from higher levels as to whether the document can be implemented as a plan.

When the Timber Management Plan is implemented, the NEPA process will continue to influence it in the future. Prior to an action such as a timber sale occurring, an Environmental Analysis Report will be made to confirm that the sale contains within environmental protection guidelines.

CASE STUDY II

Location: Bitterroot National Forest, Hamilton, Montana

Topic: Unit Plan, Moose Creek Planning Unit

1. Case Study Description

The purpose of the case study was to evaluate the organization and content of the Unit Plan for the Moose Creek Planning Unit, Bitterroot National Forest, Hamilton, Montana. The Bitterroot Forest is within Region 1 whose headquarters are at Missoula, Montana. The Bitterroot Forest is well known by many because of the controversy associated with the area in the late 1960's. Due to the public interest and environmental concern over timber management practices, a number of newspaper articles, books, television documentaries, and special reports have been prepared.

The controversy has focused upon the timber management practices of the Forest Service, particularly with regard to clear cutting, terracing and road building. As a result of the public controversy, the Region and Forest have made a concerted attempt to implement the new Forest Service planning system and to commence Unit Planning. This case study evaluated the methodology and effectiveness of the unit plan process on the planning and management procedures in the Bitterroot.

2. Resource/Management Objectives

Controversy over past management practices on the Bitterroot have caused the staff to reevaluate their planning program. This reevaluation has also occurred at the higher level within the Forest Service. As a result, the staff has made the decision to implement

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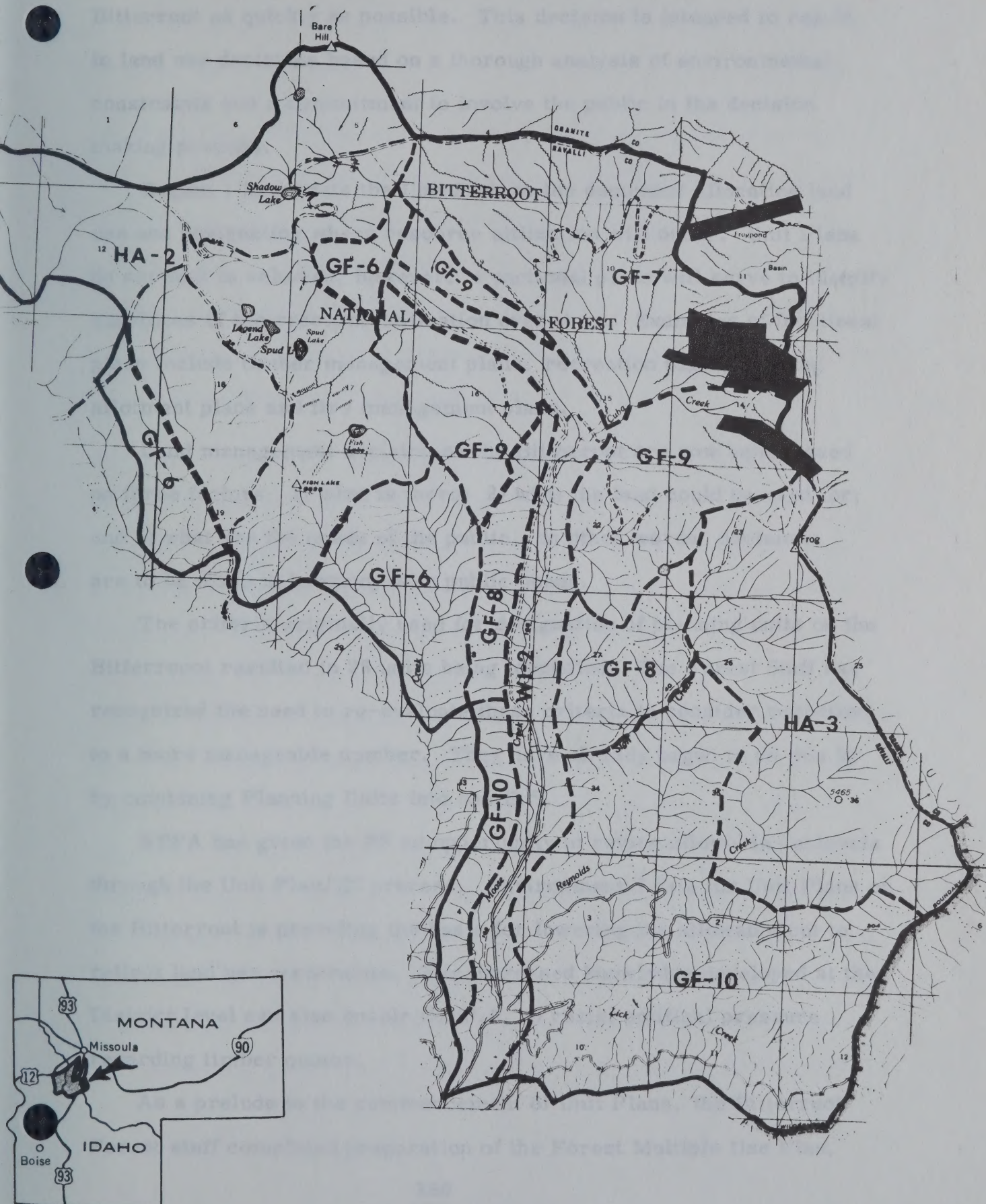
1. Case Study Description

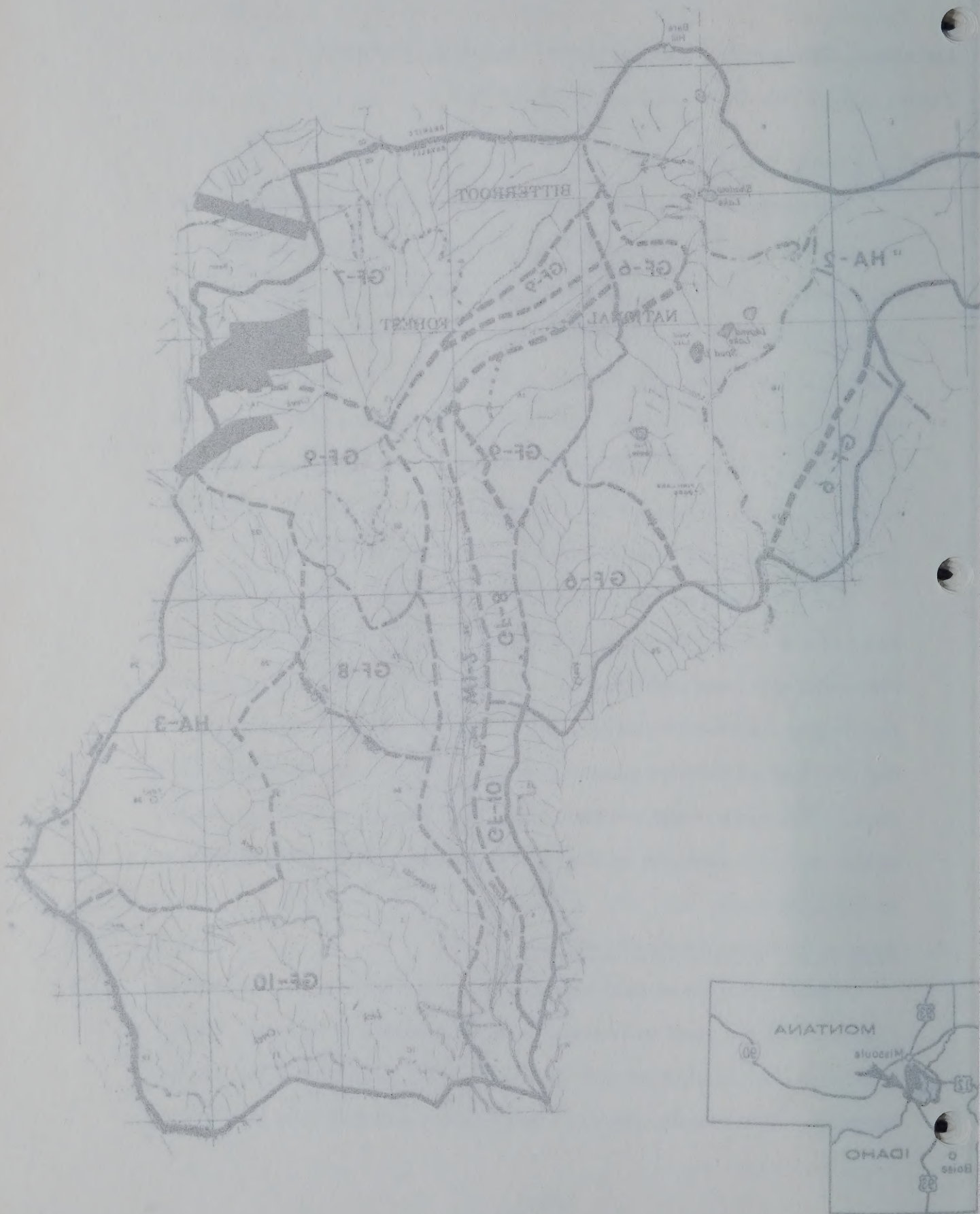
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CASE STUDY II - MOOSE CREEK PLANNING UNIT





the new Forest Service Planning and decision making process on the Bitterroot as quickly as possible. This decision is intended to result in land use decisions based on a thorough analysis of environmental constraints and a commitment to involve the public in the decision making process.

Region 1 interprets the Unit Plan as the document allocating land use and designating where resource utilization will occur. Unit Plans do not deal in volumes, however. Functional plans will serve to identify quantities of the resource utilization over time. Examples of functional plans include timber management plans, recreation plans, grazing allotment plans and fire management plans.

Land management decision on the Bitterroot are now being based on three factors: 1) what is there; 2) what the land could be used for; and 3) what are the needs of the public. In other words, decisions are to be made in harmony with public needs.

The criteria originally used for designation of planning units on the Bitterroot resulted in 28 units being identified. The Forest Staff has recognized the need to re-evaluate these criteria to consider reduction to a more manageable number. They have already begun to do this by combining Planning Units into one E.S.

NEPA has given the FS an opportunity to revise allowable cut levels through the Unit Plan/ES process. Environmental data for Unit Plans on the Bitterroot is providing the basis for lowering the allowable cut to reflect land use constraints. The increased knowledge developed at the District level can also enable the F.S. to resist political pressure regarding timber quotas.

As a prelude to the commencement of Unit Plans, the Bitterroot Forest staff completed preparation of the Forest Multiple Use Plan,

the new Forest Service planning and decision making process on the Bitterroot as quickly as possible. This decision is intended to result in land use decisions based on a thorough analysis of environmental constraints and a commitment to involve the public in the decision making process.

Region I interprets the Unit Plan as the document allocating land use and designating where resource utilization will occur. Unit Plans do not deal in volume, however. Functional plans will serve to identify quantities of the resource utilization over time. Examples of functional plans include timber management plan, recreation plan, grazing allotment plans and fire management plans.

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As a prelude to the commitment of Unit Plans, the Bitterroot Forest staff completed preparation of the Forest Multiple Use Plan.

Part I, in July of 1972 and received approval in August. The Multiple Use Plan as a whole provides the guidance that directs and coordinates local decisions for lands and resources. According to the document:

1) Part I is an analysis of the Forest's situation--its lands to its users, the local community and the region. Descriptions of traditional management zones, situation statements concerning the past and the present, and assumptions about the future have resulted in the preparation of coordinating requirements. These set direction for management. Part II will include the Unit Plans as they are completed. The preparation of Unit Plans is anticipated to take several years.

2) Part I divides the forest into management zones including: the general forest; high area; lower slope - foothill; travel and water influence; and special zone (Selway-Bitterroot Wilderness, Anaconda Pintlar Wilderness, Salmon River Breaks Primitive Area and Magruder Corridor). The forest situation is described in terms of historical background, social and economic consideration, recreation, timber, range, wildlife and fisheries and other resource categories.

3) Part I then includes a set of basic assumptions and coordinating requirements relating to the previously mentioned resource categories. The basic assumptions provide the context within which coordinating requirements are developed. These assumptions are integrated with national and regional concerns to provide localized management direction. It does not include a clear delineation of production targets and an E.S. was not written for Part I. However, this is probably due to its preparation prior to the issuance of much of the FSM 8000 series.

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3. Issues and Problems

The controversy regarding Bitterroot became a public issue in 1968 when members of the Recreation Sub-committee of the Ravolli County Resource Conservation and Development Committee became disturbed about forestry practice on the Montana portion of the Bitterroot National Forest. The issues were primarily in relation to road-buildings clear-cutting, and terracing practices and their effects. The Forest Service was accused of being preoccupied with its timber producing responsibilities at the expense of esthetic values and watershed protection. In 1969, The Missoulian published a series of articles on the Bitterroot controversy. These articles received wide distribution.

As concern mounted, plans were made to seek a Congressional investigation of the land management practices on the Bitterroot. Other views were used differing from the Recreation Subcommittee's concerns. However it became apparent that the Forest Service was being attacked by large segments or the local community which in turn was expanding the controversy into a regional and national issue over F.S. forestry and land management practices.

As a result, the Forest Service appointed an "in house" task force to review the problem on Bitterroot. The F.S. promised to make the results of the study public and said the findings would have significance throughout the northern region of the F.S. The product of this task force was the document Management Practices on the Bitterroot National Forest issued in April of 1970. The Task Force agreed that the scenic quality had been substantially impaired but that widespread damage to watersheds had not occurred. They also concluded that the allowable

cut for the forest was not too high but that the actual cut of Ponderosa Pine as well as the total cut had been too high. The need for improved management was substantiated as well as the need to involve the public more. Specific observations were as follows:

1. There is an implicit attitude among many people on the staff of the Bitterroot N. F. that resource production goals come first and that land management considerations take second place.
2. Communications with the public and other interested agencies have been seriously inadequate.
3. Multiple use planning on the Bitterroot N. F. has not advanced far enough to provide the firm management direction necessary to insure quality land management and, at the same time, to provide all segments of the public with a clear picture of long range objectives.
4. In several instances the land management has been substandard because of slips or lapses in quality control.
5. The Bitterroot N. F. has a substantial timber producing capacity that can and should be utilized to help meet the Nation's growing need for wood and to help support a stable economy in western Montana.
6. The Forest Service has been remiss in not determining how much it would cost to do a balanced job of resource management and aggressively seeking the necessary finances for the total job.
7. Increased funds alone will not solve present problems.
8. The public should not expect that new management direction will appear instantly and completely in all activities.
9. The information base for decision-making should be enlarged.
10. Any lingering thought that production goals hold priority over quality of environment must be erased.
11. Multiple use planning must be developed into a definite, specific, and current decision-making process that it is not today.
12. Quality control must be emphasized and reemphasized until it becomes the byword of management.
13. The public must be involved more deeply than ever before in developing goals and criteria for management*.

*Management Practices on the Bitterroot National Forest, April 15, 1970.

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At the same time this report was being prepared, a select committee from the University of Montana also prepared a report issued in November, 1970. This report accused the FS of being preoccupied with timber production, archaic in organization, inadequately staffed and weak in research. On the Bitterroot, the committee found that (1) "multiple use management, in fact, does not exist... (2) " consideration of recreation, watershed, wildlife and grazing appear as afterthoughts... (3) "The management sequence of clear-cutting - terracing - planting cannot be justified (and) (4) "a clean distinction must be made between timber management and timber mining."*

The report was released and entered into the Congressional Record by Senator Lee Metcalf (D-Mont.) and received wide coverage. The report addressed the fact that decision-making within the FS tends to exclude factors affecting the ultimate impact of policy and decision on people and groups not involved in policy formulation. Specifically the recommended public involvement in the decision-making process beyond invitations to public hearings and bvbriefing sessions. "The Forest Service as an effective and efficient bureau needs to be reconstructed so that substantial, responsible, local public participation in the processes of policy-formulation and decision-making can naturally take place."**

After review of the task force findings, the Region issued the document "Bitterroot Management Direction" in July 1971. This document recognized the need for a definite and visible change in approach to management on the Bitterroot. It directed the forest to follow the recommendations of the task

*Ibid, page 20

**A Select Committee of the University of Montana Presents its Report on the Bitterroot National Forest, November 18, 1970.

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1. Multiple Use Planning
2. Environmental protection on timber sales
3. Public involvement
4. Balancing Forest activities between timber production and other uses.

The forest was also directed to eliminate terracing and to use clear-cutting only where other cutting methods will not provide replacement of harvested timber with health trees. The memorandum listed the task force recommendations and added additional comment to help clarify, from the Region's viewpoint, priorities and concerns. These comments were categorized into clearcutting, terracing, roads, watershed, allowable cut and sustained yield, and wildlife, aesthetics, recreation and livestock classification of management direction.

In spite of the attitude of much of the public, controlled clear cutting should be continued under careful supervision to serve the needs of wildlife populations. The staff feels clear cutting can be limited to 5-20 acre sections with contoured boundaries to reduce visual impact.

The issue of how much timber to cut was not really resolved in the Moose Creek Unit Plan because of the lack quantification within the body of the report. An attempt was made however, to make a comparison of yields in the appendix. This undoubtedly occurred in part due to inexperience in preparing ES's. Later Unit Plans on The Bitterroot have quantified resource allocations and proposed harvesting levels more thoroughly.

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4. ROLE OF EAR/ES

The forest staff has presently submitted final E.S.'s on four Planning Units, Moose Creek, Burnt Fork, and Skalkaho Grid and Sleeping Child Planning Units. Drafts are presently underway for seven others. Thus, eleven out of 28 planning units will have been written in a period of approximately two years. The Unit Plans for the wilderness areas are being put off until later so as to give priority to developed areas.

Moose Creek is located in the General Forest Zone of the old Forest Management Zones. The area was identified as a part of a timber sale in 1959. It was scheduled for sale in 1970 based on a 5 year timber programming plan. However the sale was held up while Management Direction for the Northern Region was being prepared. Upon completion of the Region's guidelines, the Forest staff began preparation of a Multiple-Use Plan for the Moose Creek drainage area using information collected in 1963. However the impact of NEPA was beginning to be felt in the FS and a number of drafts were prepared including more recent information.

Regional staff review resulted in further revisions to include more alternatives and the holding of public hearings to allow more direct public participation in the planning process. Public meetings were heavily attended. Input was varied and diverse, reflecting the complex issues represented in the area. The plan by this time had been rewritten to incorporate the components of an ES. The report was finally accepted in 1973 and has been reviewed and submitted in final form to CEQ and EPA.

EPA's initial response to the Draft ES was a seven page letter primarily concerned with the need for additional information to be included in the final ES, the lack of descriptive actions within management units, and the need to provide more information and quantification on possible environmental

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impacts. Upon receipt of the Final ES, EPA reiterated its concern over the above items. There appears to be a difference of opinion as to what is appropriate for inclusion in the Planning Unit ES and what will follow in specific actions and accompanying EAR's. The difference seems to revolve around the amount of quantification included in the report as well as the degree to which proposed actions and their impacts are discussed in the E.S.

This particular plan is a good example of the pressures on the F.S. from many sides. A growing portion of the public has increasingly demanded greater concern for aesthetics and designation of more recreational and primitive areas, yet the local public often relies on timber cutting as their direct or indirect means of earning a living. In addition there has been increasing pressure to cut more timber. This pressure began in the late 1940's and early 1950's and has grown each year. In the 60's, there was great pressure to maximize economics, that is to get the most return from one's investment.

Future controversy is very likely in this Planning Unit when a timber sale is prepared. A large part of this area is presently roadless. It is likely that new roads needed to gain access to areas to be cut will be strongly contested by the environmentalists who consider the area to be appropriate for inclusion into a primitive classification. Some areas to be designated for clear cutting will be visible. In this regard, the Unit Plan/ES does not deal with timber sales directly and as such probably does not head off future controversy through the "new" planning process. In order to head off controversy involving specific actions within Planning Units, it will be necessary to increase the amount of detailed information regarding future actions and their probable impacts.

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The FS has been caught in the middle of the growing demand for timber, the growing concern for environmental values, and the public demand to hold down government spending. As a result the FS was put on the defensive at Bitterroot. The first ES's were written in that vein, with little discussion of the results of good land management.

Public input is now provided at both the formative stages of the planning process as well as after the draft of the plan is prepared. At Bitterroot the District Ranger is directly involved and has a large enough staff assigned to do most of the plan preparation. He also has use of resource specialists and technical writers from the Forest and Regional staffs. He is required, however, to prepare the draft plan/ES because he is the "man on the ground" who will be using the Unit Plan and undertaking projects as a part of the yearly program of work.

The Moose Creek Unit Plan/E.S. had been thoroughly reviewed due to the controversy associated with the Bitterroot National Forest. However since the E.S. was one of the first prepared by the staff, it is weak in some areas. Impacts are lacking in detail and quantification. Management decisions for management units do not quantify outputs. Trade-offs involving alternatives are generalized.

The section on consultation with others deals with the 500+ responses received, and reflects the controversy that exists in the area. Given the diversity of opinion, the staff summarized the differences in opinion and responded to them as specifically as possible.

5. RESULTANT ACTION

1. The controversy at Bitterroot has resulted in substantial modification to operating procedures on the Forest. Staffing needs have been

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improved and reorganization has occurred to incorporate the requirements of NEPA and the "new" Forest Service planning procedure.

The FS is required to gather more information in order to comply with requirements of NEPA. This in turn is causing the FS to hire people with skills not previously available within the agency. Thus, interdisciplinary planning teams now exist at the Forest and District level. This is also bringing about a change in thinking on the part of the average FS employee away from timber management and toward land use management.

The rapidity with which this Forest has embarked upon commencement or Unit Planning is impressive. However the output in the case of Moose Creek Plan is inconsistent and fairly weak in spots. Impacts, alternatives and descriptions of future proposed actions are too general. Other plans prepared subsequently showed substantial improvement. However there is the need to recognize this short coming in order to focus attention on future efforts.

The Region feels that the format of Section 102 is designed to evaluate a specific project but does not readily lend itself to plans/programs application. It may be necessary to recognize different levels of functions for which ES's are required. More dialogue is necessary on this point.

The desire of the Forest to show "on the ground" changes in management is obvious. Unfortunately the planning process is by nature a slow-moving process and requires not only large quantities of raw data but also time for the public to be made aware of and educated to the significance of this information.

improved and reorganization has occurred to incorporate the requirements of NEPA and the "new" Forest Service planning procedure.

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Currently, the Forest is in the process of implementing the plan.

The staff is also in the process of preparing an EAR for the proposed Moose Creek Timber Sale. The EAR will be sent to the Environmental Protection Agency for review about March of 1974. If approved, the sale will be advertised in May.

The BWCA occupies approximately one-third of the Superior National Forest in Minnesota and lies along the Canadian U.S. border. It is the second largest unit of the National Forest System and is the only designated refuge area.

Resource/Management Objectives

The BWCA represents a unique area in that it is designated in the Wilderness Act as an area which should be managed so as to preserve its primitive character. However, the Act also indicates that there should not be any "unnecessary restrictions on other uses, including that of timber"; and that the maintenance of any already established use of timberlands also be allowed. The area is not therefore automatically included within the category of wilderness area and as such is subject to management from a land use standpoint.

The BWCA is also unique in that it is an area within which there is a number of multiple use conflicts. Presumably, the major conflict is that they desire placed on the BWCA which conflict with recreational and commercial interest. The area also represents a classic confrontation between

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CASE STUDY III

Location: Superior National Forest, Duluth, Minnesota

Topic: Land Use Management Plan

1. Case Study Description

The purpose of the BWCA study was to evaluate the land use plan and E.S. in terms of NEPA compliance as well as to examine the planning and decision-making processes in the Superior National Forest. The Superior National Forest is one of 17 national forests in Region 9. The Region has eleven states with National Forests and is headquartered in Milwaukee, Wisconsin.

The BWCA occupies approximately one-third of the entire 3-million-acre Superior National Forest in Minnesota and lies along the Canadian-U.S. border. It is the second largest unit of the National Wilderness System and is the only designated canoe area.

2. Resource/Management Objectives

The BWCA represents a unique area in that it is designated in the Wilderness Act as an area which should be managed so as to maintain its primitive character. However, the Act also indicates that there should not be any "unnecessary restrictions on other uses, including that of timber"; and that the continuance of any already established use of motorboats also be allowed. The area is not therefore specifically included within the category of wilderness area and as such is difficult to manage from a land use standpoint.

The BWCA is also unique in that it is an area within which lies a number of multiple use conflicts. Preservationists have specific limitations that they desire placed on the BWCA which conflict with recreation and commercial interest. The area also represents a classic confrontation between

CASE STUDY III

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Topic: Land Use Management Plan

I. Case Study Description

The purpose of the BWCA study was to evaluate the land use plan and E.S. in terms of NEPA compliance as well as to examine the planning and decision-making processes in the Superior National Forest. The Superior National Forest is one of 14 national forests in Region 8. The Region has eleven states with National Forests and is headquartered in Milwaukee, Wisconsin.

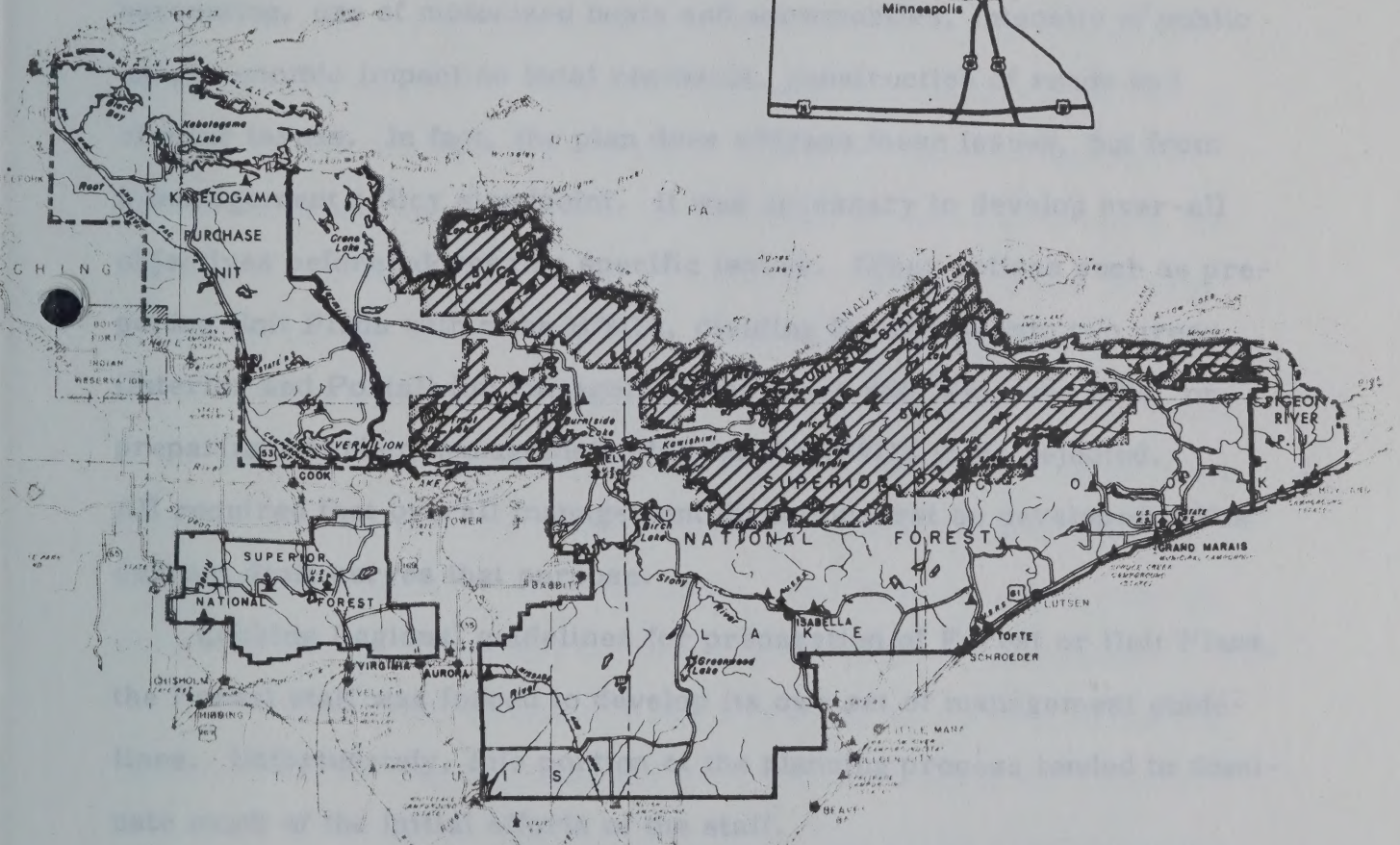
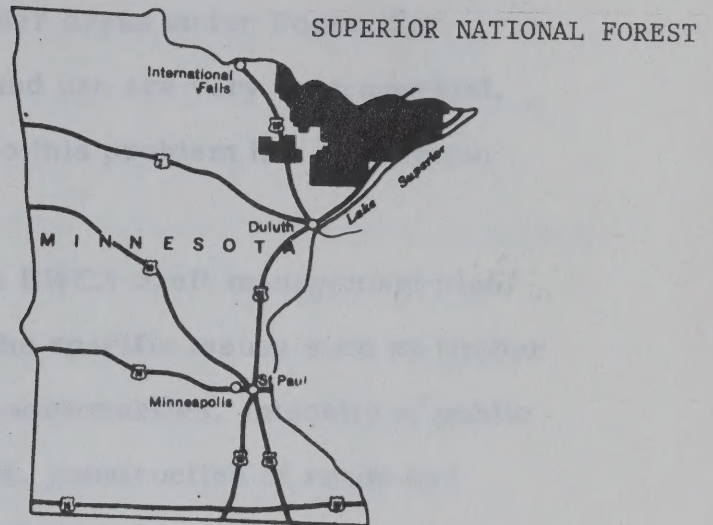
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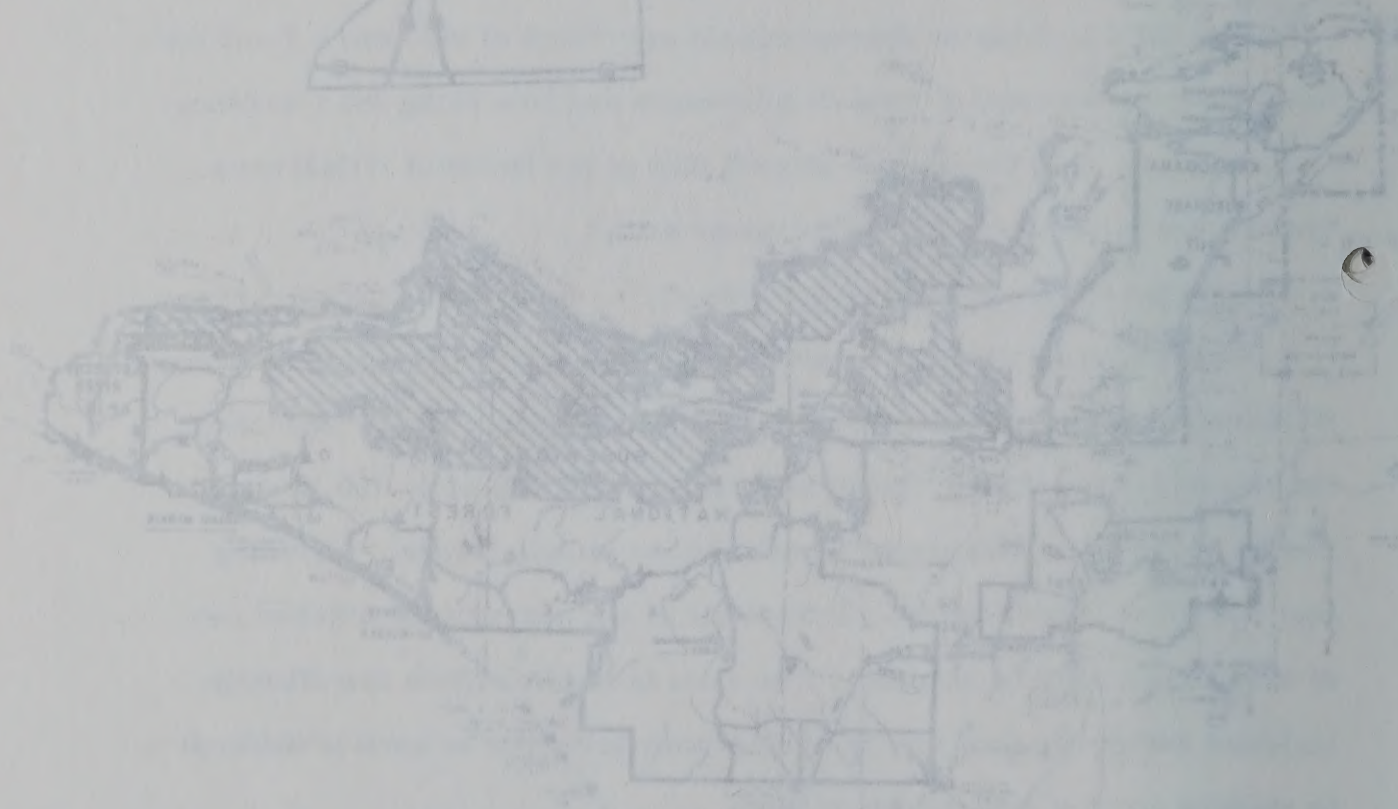
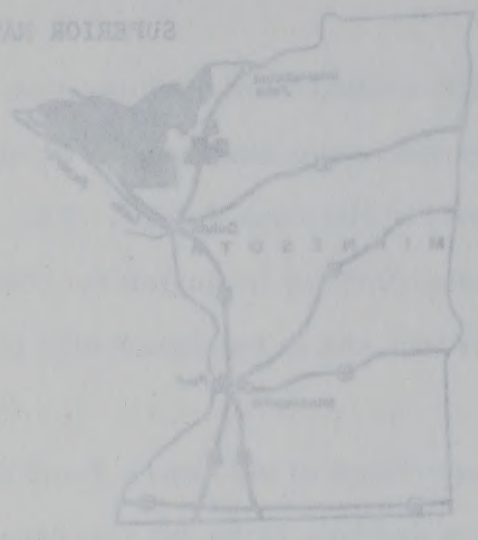
CASE STUDY III - BOUNDARY WATERS CANOE AREA



BOUNDARY WATERS CANOE AREA

CASE STUDY 111 - BOUNDARY WATERS CANOE AREA

SUPERIOR NATIONAL FOREST



BOUNDARY WATERS CANOE AREA



local interests with very strong economic ties to the area and regional interests whose values and motives are significantly different.

The resolution of these conflicts is particularly difficult in this area but it is similar to a number of other areas under Forest Service jurisdiction where allocations of land use are very controversial. For this reason, the planning solution to this problem has application to these other areas to some extent.

Much of the public criticism of the BWCA draft management plan/ES is directed toward not dealing with the specific issues such as timber harvesting, use of motorized boats and snowmobiles, intensity of public use, economic impact on local residents, construction of roads and similar issues. In fact, the plan does address these issues, but from a management policy standpoint. It was necessary to develop over-all objectives before addressing specific issues. Other options such as preparing Unit Plans within the BWCA, dividing the BWCA into two areas (Interior and Portal) for management purposes with separate ES's, or preparing a timber management plan for the BWCA were rejected. All required that overall management direction first be developed. The current draft serves that purpose.

Lacking Regional guidelines for preparation of Forest or Unit Plans, the Forest staff was forced to develop its own set of management guidelines. Unfortunately, this portion of the planning process tended to dominate much of the initial efforts of the staff.

The methodology for developing Planning Units was relatively sophisticated in terms of the integration of information. However, the geographic distribution of the resulting units does not lend itself to some of the requirements of Unit Plans. Rather, the categories tend to resemble

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management zones. The Planning Units should probably be redrawn to reflect geographic, social and economic characteristics.

3. Issues and Problems

The BWCA was designated as a unit of the National Wilderness Preservation System in the Wilderness Act of 1964. The Act authorized specific uses applicable only to the BWCA, thus requiring special regulations. A study was made of the BWCA by the Selke Committee appointed by Secretary of Agriculture Freeman. The recommendations of this committee was adopted in 1965 and became Regulation 36 CFR, Section 251.85 and covered special provisions for the BWCA. In 1969 the FS developed a management handbook made up of the above regulations as well as FS administrative guidelines. However, controversy over timber sales and use of the area for different purposes resulted in the Region and Forest offices of the FS deciding to prepare a new management plan for the BWCA. The controversy developed over ongoing timber sales that had been granted prior to enactment of NEPA in 1969. Some of the sales had been inactive. The Forest had extended some of those sales. This resulted in a public demand for Environmental Impact Statements on extension to timber sales. The Regional office decided to hold up further sales until the management plan was completed.

The Forest staff wanted to write a Plan/ES on the total forest but concern from the Region, CEQ and the public resulted in the decision to prepare a plan on the BWCA separately. The public also wanted the FS to write ES's on each timber sale. A lawsuit was finally filed by the Minnesota Public Interest Research Group which stopped further timber sales and timber cutting until a management plan was prepared and an ES was completed which evaluated the effects of timber cutting in the BWCA.

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The BWCA represents a unique environmental situation. The area covers over one million acres and includes a unique history, physical and cultural environment. As a result, the "standard" F.S. planning approach is not designed to deal with the various problems. For this reason, it is appropriate that the FS took an innovative approach to the problem.

The planning methodology was comprehensive and thorough and in keeping with the requirements of NEPA. Public participation has been extensive. However, the peculiarities of the situation have resulted in more controversy rather than less. This is in part due to the differing positions of the local, area, and regional public. These differences of opinion tend to focus on specific issues. To address these issues, however, the FS has devised a management plan which is equivalent to Part I of a Forest Plan. It was necessary to develop management direction before management objectives and actions could be submitted. The resulting plan is a compromise and, as such, will never escape public criticism. It is unreasonable to think that the planning process can eliminate controversy over as complex a problem as the management of the BWCA.

4. Role of the Plan/ES

Lacking specific Planning Area guidance from the Region, the Forest staff's methodology was innovative and comprehensive. The Region had not responded to NEPA yet, which placed much of the burden on the Forest. Guides for management of the seven Planning Areas were not yet available. The Regional staff had decided to prepare Regional Guides first and then to focus attention on Forest Plans. This was then to be followed by preparation of Unit Plans. Currently, the New England and Appalachian Planning Area Guides are completed and the Lakes States Guide is under preparation.

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In the absence of these guidelines, and due to the controversy growing over BWCA, the Forest staff undertook to prepare a new land use plan in late 1971. The first product of their efforts was a document entitled Three Million Plus which outlined the planning procedure to be used in the preparation of the new management plan. The document identified the study unit and established a set of eight tasks. The method of planning was derived primarily from "The Multiple Use and Sustained Yield Act of 1960," "The National Environmental Policy Act of 1969," and the "Wilderness Act of 1964." The first task required the planners to address organizational needs, i.e. what will be done, and when it will be accomplished.

Task two sought to obtain an understanding of issues, problems and concerns derived from interviews with technical people, forest users and land managers in four interest areas: physical resources, economic demands, social needs and politics. Tasks three and four constituted data inventory and analysis. Task five was designed to involve the public in the identification of management alternatives. Task six was the step where planning data became planning direction; that is, the identification and selection of a plan. Task seven was an environmental analysis and statement of the land use plan (management direction and coordinating instructions). The final task was concerned with the method of implementation.

Three Million Plus served to document the organization of the project into a planning program with tasks, budget, time frame and core staff. The next task undertook to identify the issues, problems and concerns (Task 2) through the collection of data and interviews with key people. Two products resulted. They were Superior Planning Notes

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which provided a summary of information on the physical, economic, cultural, legal and other information in the BWCA. This document was designed for use by Forest, District and other staff as a means of becoming generally familiar with the various aspects of BWCA. Issues uncovered as a result of the collection of this information included peripheral community dependency on the area, mismanagement of resources, over use and possible non-compliance with existing laws.

The other document, An Opportunity, was prepared to be presented to the public. It was divided into four sections. The first three provided data and information relevant to management decisions. The fourth section dealt with issues that the staff felt needed public exposure and consideration. The purpose of the document was to educate the public and elicit responses regarding these management issues.

The document summarized the statistics, acreage and value of land, history, geology, vegetation history and plant succession, history of use and regulation of the BWCA, briefly described the planning methodology and desired proposed planning units within the BWCA. This was done by integrating vegetation, edaphic conditions and climate to derive productivity ratings which were then converted into Planning Units. Planning units were rated in terms of land capability reflecting an area's ability to support life (biological productivity) and its ability to sustain, or heal itself from externally imposed disturbances.

The BWCA was divided into three Planning Units. Each then could be described in terms of location and extent, geology, surface geology and topography, minerals, soils, water, wildlife, vegetation and ownership. Once the above information was derived, it remained to describe externally imposed disturbances, i.e., man's use of the area, to provide an integrated basis from which to develop land use plans.

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Users of the BWCA were studied and characteristics evaluated.

A matrix of user characteristics was derived by matching land surface uses (such as hunting, fishing, camping, picnicing, boating, hiking, etc., or utilizing a particular source such as timber products, mining, commercial trapping) to categories of use (such as seasons of intense interest, associated value, degree and duration, resource demand dependency, and nature of public participating). Land surface users were also correlated with the previously desired planning units.

Other statistical information was presented including kinds of facilities currently available, use of facilities over time, classification of waterways, authorized land uses, acre summary of timbered commercial forest land, net volume of timbered commercial forest land by species, current allowable cut and volume harvested from Portal Zone by species, total visitors, payments to counties from National Forest receipts, and other similar information.

The report evaluated the probable long lasting effects of impacts on a resource. For example road building would result in impacts on the availability of public land, creation of open areas in the forest and effect on drainage patterns. Results were differentiated into economic and resource categories in order to distinguish between results primarily affecting physical resources and results affecting people through patterns of goods, services and opportunities. The final section of the report lists issues to be considered by the public. Categories of issues were vegetation, minerals, water supply, people and land use.

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Finally, the staff developed a report Management Objectives and Management Policy Alternatives which delineated categories within which management policy alternatives were listed. Categories included:

1) Land Surface Resource determination of use zones affecting permits, motors, use pressures, interior access, mechanical portages and hunting; 2) vegetation manipulation; 3) existing timber sales; 4) land surface resource; 5) wildlife; 6) wildfire prevention and suppression; 7) minerals; and 8) water.

The report designated possible land management levels for the BWCA. These included: 1) pine wilderness; 2) backcountry area; 3) special interest area; 4) primitive recreation area; 5) national recreation area; 6) general forest environment; 7) economic development area; 8) status quo; and 9) summer 1973. A blank matrix was included to be used by the participating staff to weigh land surface resource alternatives against the possible management levels.

The selection of alternatives considered the following possibilities:

1) alternative procedures to plan; 2) alternative land use plans; 3) alternative objectives; 4) alternative management direction; and 5) alternative policies.

The ES provided two levels of alternative analysis. The first choice considered the planning procedure to be employed. The second set of alternatives evolved around management objectives. Choices included: wilderness, primitive recreation, natural feature, recreation, general forest,

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and special area of commodity production. These alternative management objectives were screened by means of evaluating public wants and values, history of use, acts, laws and treaties and regulations of the Secretary of Agriculture.

This analysis eliminated five alternatives and resulted in the selection of two. These two (primitive recreation and special area) were considered compatible. The alternatives provided the basis for establishing a management theme and associated management actions. The alternative section did not include a "no action" alternative per se.

The staff, in the course of struggling with management objectives which should have been provided in the form of Regional and Forest guidelines, did not delve deeply enough into the actual analysis of alternative uses and their interrelationships. As a result, land use alternatives were not resolved. In addition, other alternatives, including the possibility of legislative, administrative or zoning alternatives were not really investigated.

5. Resultant Action

The reaction to the Draft ES has been vigorous and highly varied. The environmentalists are concerned about the continuation of timber harvesting in the Portal Zone while representatives of business and industry are concerned about restrictions on logging and mineral exploration. In addition, recreation groups have been upset about various limitations on motor boats, snowmobiles, mechanical portages, roads and other actions. There have been over 600 written public responses to the draft ES.

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5. Resistant Action

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The Draft ES has been reviewed by CEC as well as Regional and Washington Office levels of the Forest Service. Basic dissatisfaction

with the handling of alternatives and other portions of the Draft resulted in a decision to modify the Draft ES during preparation of the Final ES. The Final Statement is now under preparation.

Essential differences in the Final ES will be the focusing of alternatives on alternative uses as opposed to alternative objectives. A series of matrices measuring the impacts of uses on existing resources will be the basis for another analysis of impacts. Mitigation measures will then be evaluated to determine the capabilities of reducing adverse impacts. Specific alternatives will then be evaluated in order to make decisions regarding land use allocation in the BWCA. A significant difference in approach will be the concept of measuring the effect of mitigation measures on adverse environmental impacts as a means of deriving policies rather than measuring the effects of different policies. Completion of the Final ES is expected about April 1974.

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CASE STUDY IV

Location: Caribou National Forest, Pocatello, Idaho (See Exhibit M)

Topic: Unit Plan, Phosphate Planning Unit

1. Case Study Description

The purpose of this case study was to examine the implementation of the Forest Service planning system in the Caribou National Forest and its response to NEPA. The project studied was the Unit Plan for the Phosphate Planning Unit. This Unit Plan is the first to be undertaken on the Caribou National Forest, Idaho. This Forest is located in Region 4, which encompasses Utah, Nevada and parts of Wyoming and Idaho. The Regional Headquarters is located at Ogden, Utah.

Region 4 is now in the process of implementing the "new" Forest Service planning procedures. Planning Area alternatives are now being evaluated, and the Planning Areas will be delimited by July 1974. When this is accomplished, Planning Area Guides will be issued. Part I of the Land Use Plan for the Forests in the Region are now being compiled and are expected to be completed by April 1974.

Planning direction for the forests in Region 4 is derived from two sources: the Washington Office of the Forest Service and the Regional Headquarters. Broad goals and policies are obtained from Framework for the Future, Environmental Programs for the Future, the Chief's Annual Program, etc. Specific procedural direction is obtained from FSM 2100. This is in the process of being replaced by the new FSM 8000 series.

The major Regional planning direction is obtained from the Regional Land Use Planning, Multiple Use Management Guide (January 1973). This document contains three sections: Principles, Elements and Procedures.

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Topic: Unit Plan, Phosphate Planning Unit

I. Case Study Description

The purpose of this case study was to examine the implementation of the Forest Service planning system in the Caribou National Forest and its response to NEPA. The project studied was the Unit Plan for the Phosphate Planning Unit. This Unit Plan is the first to be undertaken on the Caribou National Forest, Idaho. This Forest is located in Region 4, which encompasses Utah, Nevada and parts of Wyoming and Idaho. The Regional Headquarters is located at Ogden, Utah.

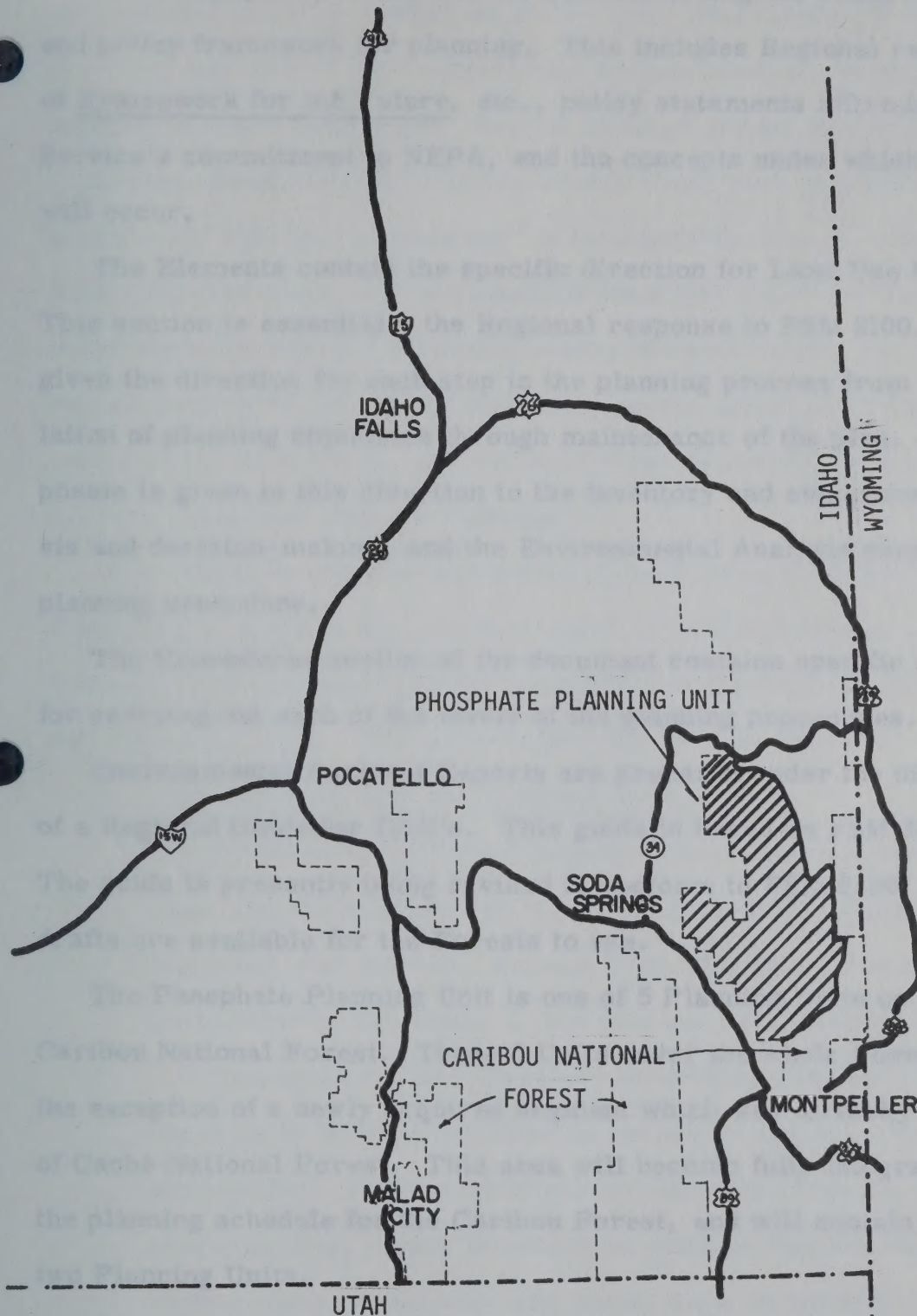
Region 4 is now in the process of implementing the "new" Forest Service planning procedures. Planning Area alternatives are now being evaluated, and the Planning Areas will be delimited by July 1974. When this is accomplished, Planning Area Guides will be issued. Part I of the Land Use Plan for the Forests in the Region are now being completed and are expected to be completed by April 1974.

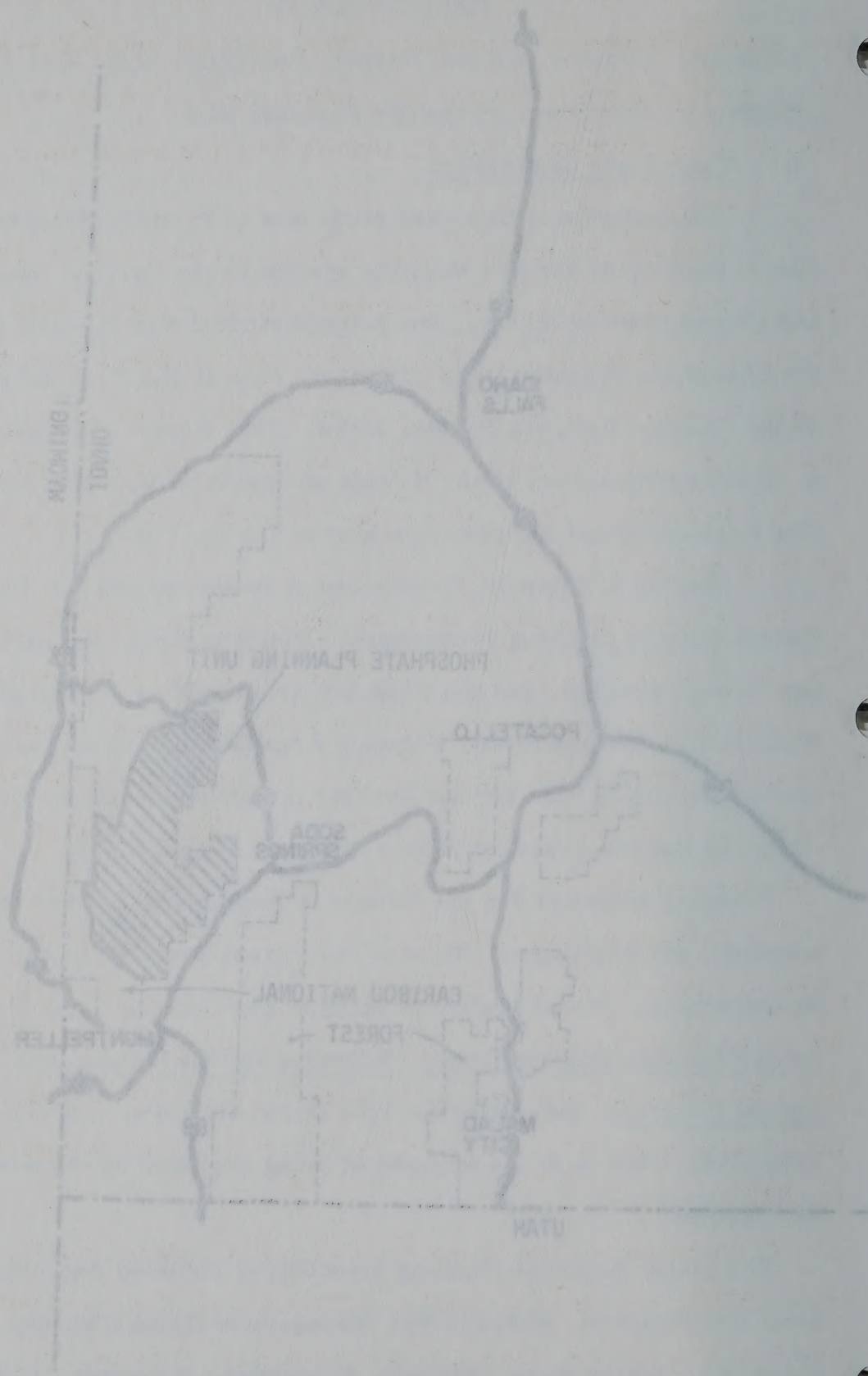
Planning direction for the forests in Region 4 is derived from two sources: the Washington Office of the Forest Service and the Regional Headquarters. Broad goals and policies are obtained from Frameworks for the Future, Environmental Programs for the Future, the Chief's Annual Program, etc. Specific procedural direction is obtained from RSM 2100. This is in the process of being replaced by the new RSM

8000 series.

The major Regional planning direction is obtained from the Regional Land Use Planning, Multiple Use Management Guide (January 1973). This document contains three sections: Principles, Elements and Procedures.

CASE STUDY IV - PHOSPHATE PLANNING UNIT





The Principles provide information concerning the broad legislative and policy framework for planning. This includes Regional refinements of Framework for the Future, etc., policy statements affirming the Forest Service's commitment to NEPA, and the concepts under which planning will occur.

The Elements contain the specific direction for Land Use Planning. This section is essentially the Regional response to FSM 2100. It gives the direction for each step in the planning process from formulation of planning objectives through maintenance of the plan. Emphasis is given in this direction to the inventory and evaluation, analysis and decision-making, and the Environmental Analysis phases of the planning procedure.

The Procedures section of the document contains specific methodology for carrying out each of the levels of the planning procedures.

Environmental Analysis Reports are prepared under the direction of a Regional Guide for EAR's. This guide is based on FSM 2130. The guide is presently being revised to conform to FSM 8300. Working drafts are available for the Forests to use.

The Phosphate Planning Unit is one of 5 Planning Units on the Caribou National Forest. These 5 Units cover the whole Forest with the exception of a newly acquired segment which was formally a part of Cache National Forest. This area will become fully integrated into the planning schedule for the Caribou Forest, and will contain one or two Planning Units.

The planning for the Phosphate Unit began in January 1973, with the delimitation of the Unit and the establishment of study objectives. The first stage in the planning process for most Forests is the preparation of a time table for planning and a short narrative explaining the

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for carrying out each of the levels of the planning procedure.

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of a Regional Guide for EAs. This guide is based on FPM 2130.

The guide is presently being revised to conform to FPM 2300. Working

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The Phosphate Planning Unit is one of 5 Planning Units on the

Caribou National Forest. These 5 Units cover the whole Forest with

the exception of a newly acquired segment which was formerly a part

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the delineation of the Unit and the establishment of study objectives.

The first stage in the planning process for most Forests is the prepara-

tion of a time table for planning and a short narrative explaining the

process that is being started for public use. The Caribou Forest, however, because of the controversial issues involved, prepared a lengthy, detailed study plan. Special interest groups that were involved expressed dissatisfaction with the overall study plan in general and specifically with the "inadequacy" of the planning team. A more detailed study plan was made, and the planning team was expanded from five members to twenty-one (including contract consultants). This plan was acceptable to the public interests, and the actual planning work commenced. At present, the inventory stage is mostly complete, and the data evaluation stage is beginning.

The complete planning procedure is outlined in the Study Plan. There are 17 steps in the process, which covers a period of almost 2 years. The final decision for acceptance of the Plan is projected for August 15, 1974. The planning procedure is as follows:

1. Planning Unit and Land Systems Inventory

By January, 1973 the Planning Unit Boundary was delimited, and study objectives were formulated. The Land Systems Inventory was started. A Land Type Map was projected for completion by December 1, but this has been delayed.

The basis for this inventory is existing data and data obtained by both Forest Service personnel and out-of-service consultants. Some good inventory material, such as vegetation, was available. Other inventories, such as fish and animal habitat were incomplete, and some, such as portions of the Land Systems, geomorphology in particular, were nonexistent.

2. Preliminary Study Design (By March 1973)

This step involved the assembling of available data and the preparation of the preliminary design of the study. This is a

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The complete planning procedure is outlined in the Study Plan. There are 11 steps in the process, which covers a period of almost 3 years. The final decision for acceptance of the Plan is projected for August 15, 1974. The planning procedure is as follows:

1. Planning Unit and Land Systems Inventory

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2. Preliminary Study Design (By March 1973)

This step involved the assembling of available data and the preparation of the preliminary design of the study. This is a

document pertaining to study design effects and initial planning actions.

3. Study Plan Preparation (By April 15, 1973)

This step involved the final preparation of the Study Plan, and the assembling of the interdisciplinary planning team. The team and consultants being used for this project were as follows:

<u>Study Team</u>	<u>Consultants</u>
1. Soil Scientist	1. Idaho State Bureau of Mining and Geology
2. Range Conservationist	2. U.S.G.S.
3. Landscape Architect	
4. Engineer	3. Mechanical Engineer
5. Team Coordinator	4. Idaho State Fish & Game
6. Wildlife Biologist	5. Mining Engineer/Geologist USBM/U.S.G.S. or Industry
7. Forester	
8. Hydrologist	6. District Rangers
9. Fisheries Biologist	7. Intermountain Forest and Range Experiment Station - Project 1016
10. Geologist	
11. I&E Specialist	8. Ecologist
12. Economists (Contract)	9. Department of Commerce
13. Minerals Technician	10. Bureau of Mines
14. Soils Technician	11. State Health Dept. Representative
15. Mining Engineer	
16. Sociologist/Political Scientist (Contract)	12. Consultant Group assigned by State and Federal Agencies
17. Ecologist	
18. Political Scientist (Contract)	
19. Archaeologist	
20. Entomologist	
21. Microbiologist	

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7.	Forester	7.	District Rangers
8.	Hydrologist	8.	Intermountain Forest and Range Experiment Station - Project 1015
9.	Fisheries Biologist	9.	Ecologist
10.	Geologist	10.	Department of Commerce
11.	LE Specialist	11.	Bureau of Mines
12.	Economists (Contract)	12.	State Health Dept.
13.	Minerals Technician	13.	Representative
14.	Soils Technician	14.	Consultant Group assigned by State and Federal Agencies
15.	Mining Engineer	15.	
16.	Sociologist/Political Scientist (Contract)	16.	
17.	Ecologist	17.	
18.	Political Scientist (Contract)	18.	
19.	Archaeologist	19.	
20.	Entomologist	20.	
21.	Microbiologist	21.	

4. Line Officer Approval (By May 1, 1973)

This involved approval of the Study Plan by the Forest Supervisor.

5. Public Notification (By May 15, 1973)

This step required notification of the public by newspaper and Forest Service publications, and by talks to special groups. The public (both local and regional) were informed of the goals, policies, and procedures that would be carried out for the Planning Unit.

6. Review and Inventory (Begins before June 15, 1973)

In this step, the planning team began a review of appropriate literature and a field inventory of the ecological and the social/cultural/economic components.

7. Summary (By Dec. 15, 1973)

This step is being completed at this time. The purpose is to determine hazards, land capabilities, etc., based on the material gathered in Step 6.

8. Public Participation (Begins January 1974)

This will involve public input into the formulation of proposed management alternatives.

9. Analysis/Decision-Making (By March 1974)

In this step, definite management alternatives will be formulated and evaluated, and a tentative proposal will be selected.

10. By April 1974, work will begin on the proposed Land Use Plan and the Draft Environmental Statement.

11 - 16. These steps will be completed by August 15, 1974, and involve the processing of the Draft E.S. (11), review by other agencies and public (12), preparation (13), processing (14), and review (15)

4. Final Approval (By May 1, 1973)

This involved approval of the Study Plan by the Forest

Supervisor.

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of the final E.S. and revised Land Use Plan. The final decision (16) involves adoption of the final Land Use Plan and public notification. Step 17 is the implementation of the plan.

2. Resource/Management Objectives

This case study involves land allocation for resource management. The Phosphate Unit Plan is the first Unit Plan to be prepared for this forest. The criteria for designating the priority one Planning Units, and the Phosphate Unit in particular, are controversial utilization methods and National importance of the resources being emphasized for utilization. The boundaries of this Planning Unit delimit a majority of the mineable phosphate rock within the Forest. The phosphate field of which this Planning Unit is a part is thought to be the largest reserve in the world.

The management objectives for this Planning Unit, if determined as the best management alternative by the Environmental Analysis process, will be to mine the phosphate while mitigating adverse environmental impacts, and preserving the existing mix of all land uses, especially grazing.

3. Issues/Problems

The major issues that are involved with the preparation of this Unit Plan revolve around the phosphate mining. The most feasible method of extraction in this area is strip mining. This mining method can produce long term environmental damage unless proper mitigating measures are provided. Prior to the actual removal of the phosphate, the overburden must be striped away and disposed of. This must be done within the parameters of environmental protection. In some strip mining locations, notably Pennsylvania and West Virginia, tailings and spoils resulting from strip mining were permanently dumped anywhere that was out of the way, thus virtually destroying the natural environment. After mining was complete no attempt was made to restore the mined area.

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Conversely, in other strip mining areas, notably Eastern Kansas, detailed environmental preserving mitigations were utilized to restore the mined areas to conditions that were often better than those that existed prior to the extractions.

Although progress is being made, the conversion from the "old" to the "new" planning systems has not reached an advanced stage in Region 4. Detailed direction for Unit Planning is available, but the lack of detailed Planning Area and Forest coordinating and management direction statements appears to be a limiting factor in the complete integration of Unit Plan decisions with National goals, policies, and objectives.

The District Rangers, who have the primary responsibility for implementing activities that are responsive to management decisions made in the Unit Plan are not members of the planning team and therefore are not involved in all phases of the plan preparation. As "consultants," the Rangers are only involved as needed. If more primary responsibility were given to the Rangers and a greater portion of the Plan and ES were prepared by the Rangers (under the guidance of the planning team), the total Forest planning process would probably be completed more rapidly. This is made difficult by staff and budgeting constraints, however. The Ranger Districts are presently understaffed. A planner, if added to a District, could prepare much of the documentary material necessary and also be responsible for mitigations called for to reduce negative impacts.

Because of the NEPA requirements for more detailed environmental analysis and for Environmental Statements, additional staff is needed at the Forest and District levels to either concentrate on NEPA-related activities, or on normal Forest Service jobs. Because of the time required for NEPA related activities, some normal activities are neglected or only carried out at a maintenance level. This reduction in the total quality of Forest Service

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work is most evident in the following activities on the Caribou Forest:

(1) livestock counting, (2) inspections of range allotments, (3) trail maintenance and (4) project design.

4. Role of EAR/ES

The Forest Service is utilizing the EAR and ES to determine if the phosphate in the area can be mined without adversely impacting the environment. In addition, the Forest staff views the EAR and ES as serving two other important functions. Since they have observed environmental damage due to previous extractions in the Caribou National Forest and on nearby private lands, it is felt that (1) the public should know what it is giving up in order to obtain phosphate, and (2) the Forest Service, through the Environmental Analysis process, could provide the maximum mitigation for adverse environmental impacts.

The analysis of alternatives for this action will be modified due to the criteria for designating this Planning Unit. The creation of Planning Units in this Forest which emphasize one specific resource, and the utilization of that resource, will probably lead to a narrower range of alternatives. Although some analysis of other land uses will be needed, most of the alternative reaction will probably be devoted to alternative methods of extraction. Because of the importance of the mineral, the "no action" alternative will need to investigate the economic conveyences of this possibility.

5. Resultant Action

The planning process is only partially completed. The planning team is currently finishing up the review and inventory step of the planning procedure. Actual preparation of the Land Use Plan and ES is scheduled for the latter part of 1974.

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CASE STUDY V

Location: Pisgah National Forest, Asheville, North Carolina (See Exhibit N)

Topic: Unit Plan, Mills River Planning Unit

1. Case Study Description

The purpose of the Pisgah Case Study was to examine The Mills River Unit Plan in terms of its content, organization and integration with NEPA. The Mills River Planning Unit is within the Pisgah National Forest, one of four National Forests in North Carolina. Two of the four Forests are in the mountains of North Carolina, one in the Piedmont and one on the coastal plain. The Forests are within Region 8, with the Regional Office located in Atlanta, Georgia.

Region 8 has been divided into six planning areas: Coastal Plains, Piedmont, Appalachian, Midlands, Ozark and Prairie. The Planning Area Guides for the Piedmont, Coastal Plains, Ozarks and Appalachians have been prepared. The Appalachians guide is combined for both Regions 8 and 9. This was the result of the work of an inter-Regional task force which initially prepared the document System for Managing the National Forests in the East. This document was an effort to translate the policies, goals and objectives of Framework for the Future into a basic planning and execution system for the development and operation of the National Forests in the Eastern United States. It was the first attempt on an inter-Regional basis to reflect a planning program which incorporated the policies of NEPA.

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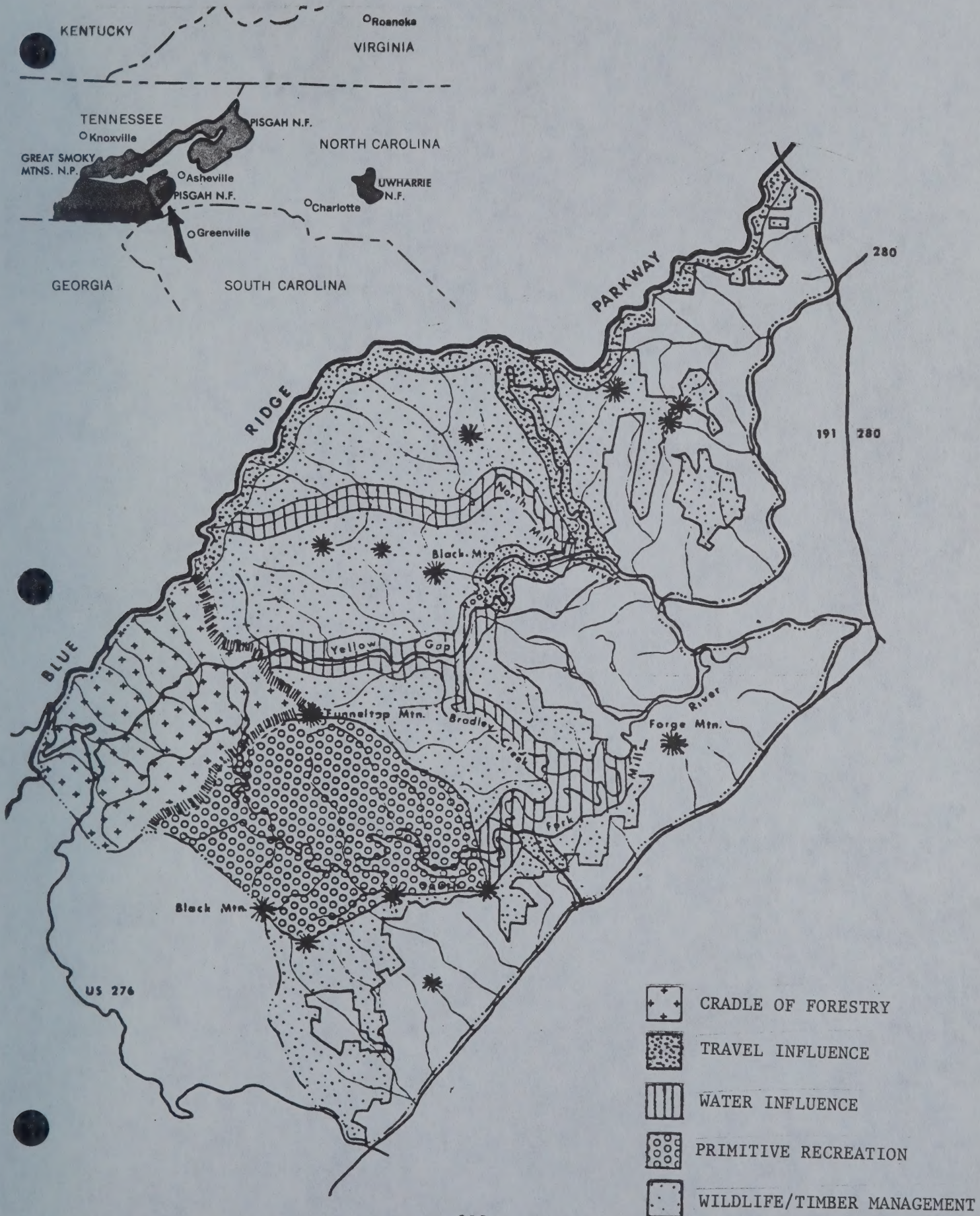
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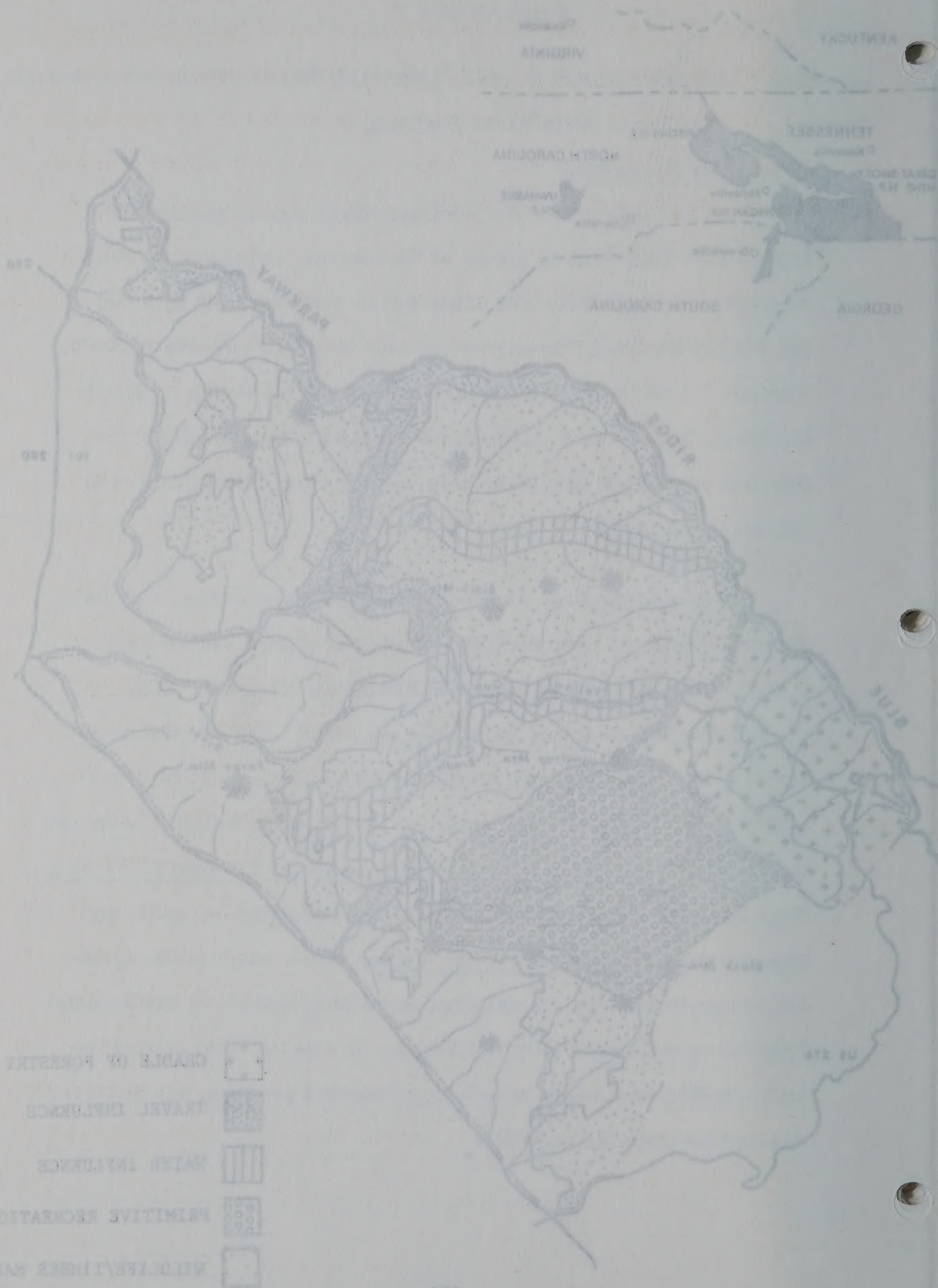
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Region 5 has been divided into six planning areas: Coastal Plains, Piedmont, Appalachian, Midland, Ozark and Prairie. The Planning Area Guides for the Piedmont, Coastal Plains, Ozark and Appalachian have been prepared. The Appalachian guide is compiled for both Regions 5 and 6. This was the result of the work of an inter-Regional task force which initially prepared the document System for Managing the National Forests in the East. This document was an effort to translate the policies, goals and objectives of Framework for the Future into a basic planning and execution system for the development and operation of the National Forests in the Eastern United States. It was the first attempt on an inter-Regional basis to reflect a planning program which incorporated the policies of NEPA.

CASE STUDY V - MILLS RIVER PLANNING UNIT



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An inter-Regional task force then prepared Guide for Managing the National Forests in the Appalachians which provides direction for the management of the environment and resources of the Appalachian Mountains. It also attempts to reflect the capabilities and limits of the areas's National Forest lands to produce benefits for the public. The Guide provides the Forest Supervisor a tool for preparation of Unit Plans. This is done by means of developing a set of basic assumptions, projections and trends for the Appalachian National Forests along with a tentative range of outputs for the following categories: 1) total recreation use; 2) developed recreation use; 3) dispersed recreation use; 4) timber production; 5) fishing use; and 6) hunting use. From those basic assumptions and tentative range of outputs direction and coordinating criteria are developed.

Direction is from two sources, National, including the acts, laws and internal directives such as Framework for the Future, and Regional. Regional direction is presented through management priorities, coordinating criteria and management standards. The coordinating criteria provide sideboards for preparation of Unit Plans, while the management standards provide specific subject guidance for preparation of the plans. The Region has also just issued a separate document containing an expansion of the standards to provide even more specific guidance for plan preparation. This document serves the purpose of translating the management standards in the Area Guide into specific actions, quantitative standards, methods and procedures as well as providing greater uniformity of Unit Plan preparation.

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In addition to preparing the above material, the Region has encouraged Forests to make organizational changes and to begin the transition from the old to the new planning process. The Pisgah Forest staff began preparation of Unit Plans in October 1971 and has modified its organizational structure to provide four assistant Forest Supervisors (long range planning, environmental management, technical services and administration). The staff also administers the other three forests in North Carolina. (Croatan, Nantahala, and Uwharrie.)

The Forest staff prepared the Mills River Plan as its first Unit Plan followed by the Wilson Creek Unit Plan. Currently two units are 50% completed (Snow Bird and Slick Rock Units) and six are in the initial stages of preparation. The staff intends to complete all Planning Units (33) within a ten year period. Once the Planning Units are completed, they will be combined with the forest coordinating requirements, planning, objectives, production targets and other components of Part I to form the Forest Plan.

2. Resource/Management and Objectives

The Mills River Unit Plan is a land allocation document. It designates land use areas within the Planning Unit for specific resource utilization. The major use areas were designated for visual use, recreation, and wildlife/ timber management. The plan is meant to be an action document for use by the District Ranger. It tells him what management activities and actions will occur in specific areas and provides direction for the accomplishment

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of the objectives. Special emphasis is given travel influence (visibility) zones. In other timber harvesting areas, aesthetic values are to receive prime consideration.

3. Issues/Problems

The main issues involved in this Unit Plan were the amount and location of land designated for primitive uses, and timber harvesting. The location of timber harvesting areas is important because of the visibility of parts of the Forest from transportation routes, especially the Blue Ridge Parkway. Past timber harvesting practices have been controversial, and the public is evidently concerned that this will continue. This problem has been compounded by the method of public participation chosen by the planning staff. During the initial stage of public participation, an information package was prepared to inform the public of the area involved, the resources involved and the general management objectives of the Forest Service. Four alternative land use plans were included for discussion.

The alternatives included within the public information package revolved around greater or lesser amounts land for primitive uses and wildlife/timber management. The alternatives were developed and reviewed by the Forest staff before inclusion in the "package". This is accomplished by means of "brainstorming" among resource specialists. Certain problems were encountered using this methodology. The public sessions tended toward "voting" for one alternative or another rather than investigating the options and alternatives possible within the environmental constraints. Issues of most concern to the public

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included designation of wilderness and primitive areas, road building, timber cutting and trout fishing.

When the Forest staff designated a land use alternative that the public had not "voted" for, the public reacted with comments stating that their desires were not considered or else ignored by the Forest Service.

Actually, the preparation of land use alternatives as a part of the information package prevented public input from evaluating trade-offs and activity interactions. The development of alternative land use seems only appropriate after both the staff and the public have had the opportunity to consider guidelines, objectives and priorities and to analyze the available resource inventory data.

The staff has modified its approach to this aspect of plan preparation in other Unit Plans.

The second Unit Plan prepared at Pisgah (Wilson Creek) included substantial modification to the format of the information package. The public information package was modified to reflect management possibilities for different locations, not land use areas.

These possibilities were then summarized into three management program alternatives which reflected varying emphasis as to products and use outputs. The three alternatives differed in terms of amount of timber cut for purposes of optimizing silviculture, wildlife and recreation opportunities. The proposed project in the plan was a "compromise" of the alternatives. The latter approach avoided the problem of "voting" for a particular land use plan. However a major difficulty with this method has been the lack of a clearly defined land use map. Rather, activities such as proposed

included designation of wilderness and primitive areas, road building, timber cutting and trout fishing.

When the Forest Staff designated a land use alternative that the public had not "voted" for, the public reacted with comments stating that their desires were not considered or else ignored by the Forest Service.

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However a major difficulty with this method has been the lack of a clearly defined land use map. Rather, activities such as proposed

regeneration areas, managing featured wildlife species, and closing and revegetating system and non-system roads are designated on maps along with existing features. The result is an overlay of management goals which is somewhat confusing in terms of interaction of resources and land uses. The Unit Plan represents a set of management goals and activities more than a program of action for designated land areas.

Another problem concerns the general preparation of ES's. Region 8 is well along in terms of its conversion to the "new" system. The "System", "Guide" and "Criteria" documents provide a substantial amount of information for Forests to utilize in the Unit Planning process. However guidelines for preparation of ES's are lacking. In Pisgah, this has resulted in a lack of consistency and in the presentation and analysis of information. The preparation of alternatives and description of impacts in the two ES's reviewed probably do not meet current CEQ standards but reflect the learning process of the Forest staff. The Regional Environmental Coordinator can assist the Forests by means of providing guidance and feed-back.

The need for public involvement and education regarding planning of the Forests is recognized. However, there still is a reluctance to actually involve the public on the part of some of the staff. This is probably due to the desire to retain the "status quo" of the past. On the other hand, the demands of the new planning system are resulting in other activities being put off. One of these is the opportunity to deal with the public on an informal basis. This is an important activity in this area where there is considerable private property adjacent to and within the forests.

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Functional approaches to Forest work programs still dominate the thinking of the Forest staff, primarily due to the method of financial allocation. However, the reorganization of the staff has resulted in a gradual change toward the interdisciplinary approach to land use planning and away from the "Timber Beast" philosophy of forest management. There is still the need to give planning the priority necessary to insure that District Rangers participate in and respond to the new system and its ramifications.

4. Role of the EAR/ES

Environmental Statements are being prepared for all Unit Plans in Region 8. At Pisgah, the Mills River Unit had a separate plan and E S. However, on the Wilson Creek Unit, both documents were included in the same final package. The Forest staff proposes to keep the two documents separate due to the "different function of each".

Draft guidelines for preparing EAR's were issued in early '73 by the Region but are apparently not official. No Regional guidelines for ES's were known to exist. Rather, format is left up to the Forest staff.

The Environmental Statement process has allowed the Forest Service to consider the environmental consequences of proposed actions before approval. The Unit Plan, in company with the E S., provides the basis for evaluating the environmental significance of particular programs. The Unit Plan is the basic action plan from which resource allocations can be evaluated and substantiated. It is also the point from which the District Ranger prepares his work program. From an organizational standpoint the system is

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CASE STUDY /VI

Location: Northeastern Forest and Range Experiment Station, Upper Darby, Pennsylvania

Topic: Forest Pest Control Project

1. Case Study Description

The purpose of this case was to examine the Forest Service's approach to a project involving a forest pest, the Gypsy Moth. Specifically, VTN's task was to evaluate the approach, methodology and content of the Final Environmental Statement on the Cooperative 1973 Gypsy Moth Suppression and Regulatory Program. This program is a cooperative State and Federal program to suppress the impact of the Gypsy Moth in the northeastern United States. The program is not specifically concerned with National Forests but rather is directed toward assisting States' efforts to control the pest.

The Gypsy Moth, Porthetria dispar, is an insect that is an important forest pest. They are harmless as moths but as caterpillars feed on the leaves of forest, shade, ornamental and fruit trees and shrubs. A single defoliation can kill some softwood trees. Two or more defoliations can kill many types of hardwoods.

The moths have been in the country since 1869 and through extensive Federal-State control and quarantining operations have been confined to New England, New York and Pennsylvania for many years. Recently gypsy moth populations have increased and are currently found throughout most of the Northeast. Nearly 2 million acres of forest were damaged in 1972 which is twice that affected in 1970, more than six times the 1969 damage, and twelve times more defoliation than recorded in 1968. Suppression operations have been used since 1969 but were reduced by more than 50% in 1972 due in part to the more stringent controls regarding pesticide utilization.

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2. Resource/Management Objectives

Presently, the Forest Service, in coordination with the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture, (APHIS) cooperates with the responsible State agencies of Connecticut, Delaware, Iowa, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, and West Virginia for the suppression and regulation of the gypsy moth.

The Forest Pest Control Act allows Federal and State government's to cooperate through the Forest Pest Action Program to prevent, detect, and evaluate insect and disease damage. Forest Service scientists provide technical assistance to the States in insect and disease management to minimize losses. This same group of scientists is responsible for prevention, detection, evaluation, and suppression activities on Federal lands and coordinates the management efforts on lands of all ownerships. The Washington Office, Division of Forest Pest Control, provides policy, guidance and nationwide coordination as well as back up technical advice. The Washington Office works with each Region's Forest Pest Control staff except in Regions 8 and 9. In these two Regions, pest control is administered through the State and Private Forestry framework. This is due primarily to the number of states and private forests within these two Regions. The Forest Pest and Management Group of the Northeastern Area State and Private Forestry has undertaken primary responsibility for preparation of Environmental Statements for the gypsy moth program.

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The Forest Service's procedures regarding detection of outbreaks is accomplished in a number of ways. Included are: 1) aerial surveys; 2) use of remote sensing techniques; and 3) ground examination of permanent detection plots; 4) public contact. Once an outbreak was detected, the FS would make three evaluations: 1) a biological evaluation to determine the significance of an insect, its probable cause, and the expected damage without suppression; 2) a cost-benefit evaluation to weigh the cost of suppression and any adverse effects against the values saved; and 3) adverse effects of the suppression method planned.

The National Environmental Policy Act caused the FS to revise their third evaluation to an environmental evaluation. Its purpose is to determine adverse impacts from the suppression needed to mitigate the adverse impacts, and a consideration of alternatives, including "no-action." NEPA has resulted in greater amounts of information being provided in the environmental evaluation.

Funding of projects is based upon an application for dollars out of the \$1.9 million allocated by Congress as a contingency fund for emergency control of pests and diseases. Application for funding is backed up by the biological/cost-benefit/environmental evaluation.

3. Issues and Problems

The FS is acting in an advisory capacity regarding the gypsy moth where the impact is on non-Federal land. Therefore they do not want to upstage or usurp the decisions of the participating states. Nevertheless the public often perceives the FS as the "doer". At public hearings, the FS attempts to clarify the fact that it is responding

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Although studies and evaluations are prepared yearly, the real effect of the gypsy moth is not known nor is likely that the FS can affect the future impact of the pest under existing circumstances. This is due to legal and financial constraints, lack of technical capability, and lack of knowledge of the impact of continued defoliation on species distribution.

4. Role of Plan/ES

Since the suppression program began at approximately the same time that NEPA was passed, the planning and environmental impact procedures of the gypsy moth program have been combined and have evolved in a coordinated manner.

ES's were first prepared on the gypsy moth program in 1971. This was the first time ES's were written in the Forest Service. A separate ES was written for each participating state (New York, New Jersey, and Pennsylvania). The decision to write ES's was made in the Washington Office after reviewing the Forest Pest Control Act regarding the legality of federal participation and requirements of NEPA. The reports were written hurriedly and were criticized for a lack of information. Other areas of controversy revolved around use of pesticides and methods of application. The ES's were also

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criticized as being a justification of a decision already made. This was a valid criticism. These ES's were important since they pointed out the lack of information on the subject as well as the ignorance regarding preparation of ES's.

In 1972 the program was evaluated as to whether or not to combine the regulatory and cooperative suppression efforts as well as whether or not to combine cooperating states into one ES. The decision was finally made to do both and a single programmatic ES for the three participating states was prepared. This ES was written in coordination with APHIS. The 1973 ES was prepared in the same way with the addition of Rhode Island as a fourth participating state.

The FS has taken the position that a combined ES will be done each year after the data regarding degree of impact has been collected. The ES is oriented to the yearly specific response of the FS and the cooperating states. This policy is being proposed for the Spruce Budworm, Douglas Fir Tussock Moth, and Southern Pine Beetle. They also are evaluating programs with ES's for the Mountain and Western Pine Beetles.

The program of writing ES's has brought about certain changes in the FS approach to forest pest management and control. The need for further information was recognized and specific measures were designed to collect data. Information was obtained through contracts with universities. A data base is now available in the Washington Office.

Due to the problem of staff size, the FS developed priorities regarding different pests, and studies were undertaken within the FS on cost-benefit analyses and other special studies. Public complaints

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about the lack of public involvement, questionable use of pesticides, and lack of alternatives brought about additional changes. For example, alternatives are being developed earlier in the planning process so as to allow the public more time to respond.

The lack of a requirement for ES's in the participating states at first resulted in little response to FS requests for information to be included in the Draft ES. However, this has changed slowly and more data is being collected, evaluated and provided to the FS now.

A problem that has emerged is that of completing the ES processing requirements in time each year to make the deadline of program actions that are to be initiated. The suppression of gypsy moths is only effective in May and June due to the life cycle characteristics. Therefore a delay in the approval of the program/ES could bring about serious consequences.

A second observation is the repetitiveness of the 1973 and proposed 1974 ES's. This brings to question the need for yearly ES's. An umbrella programmatic ES may be more appropriate with EAR's being prepared for yearly programs. Where different methods of treatment are discovered or proposed, the ES could either be amended or supplemented.

5. Resultant Action

As a result of NEPA and increasing public awareness, the FS has embarked on a cooperative program of dealing with the gypsy moth. This program involves preparing an ES in cooperation with APHIS and the cooperating states. A data collection program is well underway and public involvement and participation is now possible.

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Given the constraints listed above, the FS is attempting through the ES process to develop an integrated approach to deal with the gypsy moth on a regional basis. The effort is directed toward controlling overall population rather than eradication.

and costs attributable to land use planning procedures.

However, our research led to the conclusion that developing an accurate and equitable allocation scheme is not possible for the following reasons:

- a. The Forest Service has integrated its work on Environmental statements and on land use planning to the point where a document such as the Ten Year Timber Management Plan is both the land use plan and the environmental statement. Thus the costs of all work relating to the creation of the Document is attributable to both the preparation of environmental statements and to land use planning procedures.
- b. The accounting procedures and budget records are not designed to identify the number of hours of work spent on a particular activity. This means that the amount of labor spent on either environmental statements or land use planning cannot be established from these sources. Since the cost of labor is a major component of the total cost of environmental statements or land use planning it is not possible to establish accurately the total cost of either environmental statements or land use planning.

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D. COST ANALYSIS: U.S. FOREST SERVICE

1. Cost Allocation

In the case studies, VTN attempted to develop an equitable cost allocation scheme that distinguishes between costs attributable to the preparation of environmental statements and costs attributable to land use planning procedures.

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Service pays its employees salaries out of separate accounts based on separate appropriations. Each appropriation provides a fixed amount of funds for certain activities. The line offices distribute the funds among their subordinant offices and employees so that each employee's salary may consist of money from several different appropriations. Since no funds are specifically appropriated for work on environmental statements, the time spent on them is paid for by funds appropriated for other activities.

Along with the distribution of available funds, the line officers prepare annual work plans which state the number of units of an activity that the line officer estimates will be completed during the fiscal year. A job code and job description are provided in the annual work plan. For example, code 2100 is described as "Multiple Use Review and Process Environmental Analysis Reports." Here the line officer estimates how many reports will be worked on by each member of his staff, not how many hours will be required. Also, code 2100 does not separate the land use planning work from the work on the Environmental Analysis Reports.

At the end of the fiscal year the line officers can compare the amounts of work actually completed with the earlier estimates. The workload analysis helps them in preparing future annual work plans. However, the workload analysis does not indicate the amount of time spent

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on environmental statements and environmental analysis reports. The reason is that environmental statements are not homogeneous documents. In the Apache National Forest case study, Forest Supervisor's staff provided estimates of the amount of time they spent on two recent environmental statements (excluded regional assistance and clerical help). They identified 1,998 hours worked on the Ten Year Timber Management Plan and 160 hours worked on the Phelps Dodge Application of Mineral Prospecting. The unique character of the environmental statements makes any rough projections based only on the number of documents prepared extremely unreliable.

To repeat, the existing accounting procedures and budget records do not provide accurate information concerning the amount of labor spent on environmental statements and land use planning. Less obvious costs of the NEPA requirements include the value of those activities that have had to be curtailed as manpower has been shifted to handle the increased amount of labor required on the environmental statements. The Forest Service believes that all other activities have suffered. Particular concern was expressed about recreation facilities and the "On The Ground" supervision of the timber cutting. The problem with the Timber Sales Management Plan/ES is that while NEPA has encouraged the Forest Service to include more restrictions on the activities of private loggers to protect the environment,

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the additional office work generated by NEPA has reduced the amount of supervision in the forests. Since the private timber cutters can increase their profits by ignoring the restrictions established by the Forest Service, the concern is that the lack of supervision will reduce the favorable impact of NEPA on the forests' environment.

2. Cost Allocation Scheme

Since the present accounting procedures and budget records of the Forest Service do not lend to tracing work devoted to 102 Statements, the agency could establish a time coding system which is similar to that of the U.S. Bureau of Land Management. The Forest Service could develop guidelines and procedures detailing how to charge environmental analysis and environmental statement work as well as other Forest Service endeavors. This system could then be tested over a specific period of time and modified accordingly.

the additional office work generated by NEPA has reduced the amount of supervision in the forests. Since the private timber cutters can increase their profits by ignoring the restrictions established by the Forest Service, the concern is that the lack of supervision will reduce the favorable impact of NEPA on the forest environment.

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Since the present accounting procedures and budget records of the Forest Service do not lend to tracing work devoted to NEPA, the agency could establish a time coding system which is similar to that of the U.S. Bureau of Land Management. The Forest Service could develop guidelines and procedures detailing how to charge environmental analysis and environmental statement work as well as other Forest Service endeavors. This system could then be tested over a specific period of time and modified accordingly.

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E. NEPA INFLUENCE AND INTEGRATION

In 1971, the Forest Service began the integration of its planning system and procedures with NEPA. Since that time, the influences of NEPA, both positive and negative, have been evident in the activities of the Forest Service.

The integration of NEPA and the Land Use Planning System are indicated by the following points, and are discussed below.

1. The "old" planning system was revised and merged with the requirements of NEPA.
2. The policies that guide Forest Service activities and decisionmaking have been integrated with the policies of NEPA.
3. Each of the planning levels reflects specific dimensions of the NEPA process.
4. Unit Planning is considered to be the implementation of the NEPA process.
5. Functional programs, directed and coordinated by Unit and Forest Plans, reflect the environmental protection requirements of NEPA.
6. The Environmental Analysis and EAR have been incorporated as an "every day" analysis tool for both planning and decisionmaking.

1. Planning System Revision

In 1971, Title 2100 of the Forest Service Manual, "Multiple Use Management," was revised. This revision of the planning system was in response to the National Environmental Policy Act and merged the requirements of NEPA and the practices that had been developed for Multiple Use land management.

The planning system operates under Forest Service objectives that are established by the American people through the political process. The Multiple Use/Sustained Yield Act and NEPA require that the management development, use, and protection of the National Forests provide a combination of public benefits, including the production of wood, water, forage, wildlife and recreation within the limits of environmental protection and

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enhancement. The planning system has been revised to conform to this requirement.

The Forest Service land use planning system is now structured to identify, measure, evaluate, and coordinate overlapping and interdependent ecological, social and economic systems in order to facilitate meeting the environmental objectives. Planning activities, decisions, and subsequent actions are therefore in accord with the National Environmental Policy Act of 1969.

2. Forest Service Policies

The policies that guide Forest Service activities and decisionmaking are summarized in Framework for the Future, which was produced to guide the thinking and decisionmaking of the Forest Service, and to identify the general scope and character of the role the Forest Service should play in the society of today and tomorrow.

Although the Framework was published prior to the impact of NEPA on the Forest Service, one of its objectives is to protect and improve the quality of air, water, soil, and natural beauty. The policy to implement this objective as stated in Framework for the Future is to promote practices to protect and enhance environmental quality in management of all forest ownerships. This broad objective is refined in the Environmental Program for the Future, a program that defines goals to improve environmental management and to increase the flow of goods and services and other benefits from forests and related lands. An Environmental Statement is presently being written for the Environmental Program to insure its fulfillment of the NEPA philosophy.

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Program for Fiscal Year 1974 listed four areas of program emphasis, two of which are a direct reflection of NEPA:

Meet national environmental goals, which include all activities that maintain, improve, or prevent degradation of the National Forest environment, scenery, water, wildlife and air.

Achieve National Housing Goals, which includes all activities that contribute to producing timber to meet national demands at reasonable prices consistent with maintaining environmental quality.

The broad goals and policies and specific programs and guidelines that serve as sideboards for Forest Service planning and decisionmaking have been fully merged with NEPA.

3. Levels of Planning

After goals, policies, and specific programs have been established at the Washington level, planning and implementation of these goals, policies and programs occur at three levels of the Forest Service: the Region, Forest and Planning Unit. The revised planning system recognizes that there is a hierarchy of planning, and that each level addresses different types of questions with different degrees of specificity of impacts.

The three documents that are generated during the land use planning process are all responsive to NEPA. The Planning Area Guide refines the Washington level policies and directives to make them applicable to the particular conditions of the Planning Area. The Guides provide direction for planning and management of lands, and latitudes of management and output levels for individual programs. Management direction, and coordinating criteria emphasize management of natural and human resources within the parameters of environmental protection. The Forest Service considers that Environmental Statements are normally required on Area Guides to insure their compliance with NEPA.

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Part II of the Plan is composed of the individual Unit Plans that are developed under the direction of Part I. Environmental Statements written for Part I of the Plan. Each of the Unit Plans that comprise Part II is also written with an Environmental Statement.

4. Unit Planning

Besides considering the Land Use Planning System to be a reflection of NEPA, the Forest Service views the formulation of the Unit Plans to be the implementation of the NEPA process. As in the previous planning levels, an Environmental Statement is required for all Unit Plans, which is appropriate since these are the basic land use documents. In many cases, the Environmental Statement and the Unit Plan are presented as one, integrated document.

The Unit Plan allocates land for specific uses, provides coordination among uses, and gives impact mitigating direction to be used when actions are implemented.

Unit Plans provide the basis for evaluating the land use constraints of a particular area. This is accomplished by means of thorough inventories, and public input regarding land use alternatives. Thus, the Unit Plan reflects the NEPA policy of weighing the environmental consequences of proposed plans and allowing public involvement.

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Unit Plans provide specific management guidance and management prescription for functional activities, and annual work programs. The functional plans are concerned with exactly how and when the actions will be implemented.

Environmental Statements are normally required for some types and phases of functional programs, such as Timber Management Plans that include a Timber Sale Action Plan, all activities in roadless areas, new ski areas, and pesticide programs.

Other functional activities such as individual timber sales do not require Environmental Statements if they are adequately covered by a Statement on Programs or Plans, but do require EAR's. Both the direction and objectives provided by Unit Plans to Functional Programs and the specific action prescriptions of the Function Plans are fully responsive to NEPA.

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CHAPTER VI

FINDINGS AND RECOMMENDATIONS FOR THE U.S. FOREST SERVICE

The following section is a summary of the findings and conclusions derived from an analysis of the various tasks undertaken. The organization of this section follows the basic headings: 1) Policies; 2) Plans and Programs; and 3) EAR/EIS Process. Within each heading criteria derived from the basic components of the National Environmental Policy Act are listed followed by a summary of the findings applicable to each criterion. Where appropriate, recommendations are also listed which suggest modification to the Forest Service planning and decision-making process.

A. POLICIES AND PROCEDURES

Criterion 1: All agencies of the Federal Government shall review their present statutory regulations, and current policies and procedures for the purpose of determining whether there are any deficiencies or inconsistencies therein which prohibit full compliance with the purposes and provisions of the Act and shall propose to the President not later than July 1, 1971, such measures as may be necessary to bring their authority and policies into conformity with the intent, purposes and procedures set forth in this Act. (NEPA, Sec. 103)

a. Findings

- (1) The Forest Service planning system was completely revised in 1971 in order to merge it with the requirements of NEPA. The "new" planning system recognized a hierarchy of planning levels, each covering progressively smaller land areas that are concerned with increasingly detailed planning activities and planning guidance and coordination, and unique environmental situations.
- (2) Guidelines for implementation of the "new" system were broad, to allow for Regional ingenuity to produce the best

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- (2) Guidelines for implementation of the "new" system were broad, to allow for Regional Agency to produce the best

methodology for solving environmental problems. The diffusion of the different approaches, however, has not occurred throughout the Forest Service.

- (3) A series of documents that translate the overall Forest Service objectives and policies into specific directives and guidelines for planning within the framework of environmental protection is being prepared at each of the planning levels, the Region, Forest and Planning Unit.
- (4) There are variations in the implementation of the planning system and in planning level emphasis. In some areas, Forest Plans (Part I), or Unit Plans or functional plans are being written prior to the development of higher level directing documents. This has resulted in confusion and inconsistency in the content of Forest and Unit Plans. Without Area Guides, the preparation and utilization of more specific planning tools is difficult at best.

b. Recommendations

- (1) No recommendation.
- (2) The Forest Service should now hold inter- and intra-Regional training and dialogue sessions to begin dissemination of planning and environmental protection methodologies. The Forest Service should also begin to develop Service-wide quality control of planning system outputs.
- (3) The preparation of specific directions and guidelines at each of the planning levels is appropriate because of the unique situations inherent at each of the levels.
- (4) All Regions and Forests should emphasize the early completion of Planning Area Guides and Forest Land Use

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Plans, Part 1, in order to insure the complete integration of Unit Plan decisions with Forest, Regional and National goals, policies and objectives.

B. PLANS AND PROGRAMS

Criterion 1: Identify and develop methods and procedures, in consultation with the Council on Environmental Quality established by title II of this Act, which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations. (NEPA, Sec. 102(B))

a. Findings

- (1) The Forest Service planning system and NEPA have been merged to form a single, integrated process.
- (2) The Washington level planning objectives and policies, primarily Framework for the Future, and An Environmental Program for the Future provide long-term planning guidance that emphasizes environmental considerations.
- (3) The function of the Regional Planning Area Guides is to refine the Washington level guidelines to be applicable for Planning Areas. The Guides should provide specific planning guidance and direction for relatively homogeneous sub-Regional areas. The guidance and direction emphasize environmental protection.
- (4) The Forest Land Use Plan is divided into two parts. Part 1 is a coordinating and guidance document that refines the Planning Area Guide direction so that it is applicable to unique Forest situations. The Forest Plan (Part 1) provides planning sideboards emphasizing environmental considerations for Unit Planning. Part 2 of the plan is a compendium of Unit Plans.

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- (5) The major action planning level of the Forest Service is the Planning Unit. A Unit Plan is a land use plan for a relatively homogeneous area of the National Forest. The Plan allocates land for specific activities and provides volumes, coordination, and guidelines for functional programs. This is appropriate since the Planning Unit is where the actual "on the ground" environmental assessment and management decisions for actions occur. The Unit Plan can be considered the key stage of NEPA implementation.
- (6) Adoption of the "new" planning system is still in the early stages. Some areas are still dominated by the functional approach to multiple use. This is often reflected in Unit Plans and tends to override the real land use potential.
- (7) The Unit Plans are generally specific in providing direction for management areas that are designated for certain resource uses such as timber harvesting, wildlife habitat, and recreation, but usually only provide non-specific information when dealing with undeveloped areas that are for the most part roadless and may be modified for timber harvesting. This will probably result in future controversies.
- (8) Unit Planning in some areas is being implemented quite slowly. Some areas lack specific guidelines, and there is a general Forest Service-wide lack of consistency in the presentation and analysis of information. The output is generally not sufficiently detailed to meet

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the specific requirements of Section 102. Much of the content of Unit Plans is too general. This will improve with time. However, there is the need to recognize this shortcoming in order to reduce it in the future. The desire of the Forest Service to show "on-the-ground" changes in management are obvious. Unfortunately, the planning process is by nature a slow-moving process and requires not only large quantities of raw data but also time for the public to be made aware of and educated to the significance of this information.

- (9) Functional Activity plans are based on Unit Plan land allocations, use constraints, and general volumes. The Unit Plans provide the data base for actions and locate activities. The activity plans, under this direction, provide specific utilization volumes and methodology.

In the case study areas, no activity plans were being developed under Unit Plan direction because of the slow rate of Unit Plan completion and the newness of the total system.

- (10) External requirements to "cut more wood" have created a hardship in the Forest Service timber management program because of the lack of land allocation plans which distribute National Timber production requirements in accordance with land capabilities.

b. Recommendations

- (1) The merging of the planning system and NEPA is appropriate since the planning system decisions now must reflect the environmental considerations required by NEPA.

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- (5) No recommendations.
- (6) The Forest Service should emphasize the integration of the "interdisciplinary planning team" at the Regional, Forest and District levels. (See Section 3, Criterion 5.)
- (7) It is recommended that the Forest Service improve the detail included in the plans regarding future actions and their probable impacts. This involves providing detailed management guidance for all land use areas, not just those that will be intensively utilized for a specific use such as timber harvesting, recreation or mining.
- (8) Specific and where possible uniform guidelines for preparing Unit Plans should be provided by the Washington, Regional and Forest offices.
- (9) Upon completion of Area Guides and Forest Plans (Part I), Unit Planning should continue to receive the highest priority to allow for the inclusion of activity plans in the total NEPA-related planning process.
- (10) This problem of external pressures to cut more timber should be solved by the completion of Unit Planning. Lands allocated to timber production, volumes and constraints will be known, as well as the production levels.

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C. EAR/ES PROCESS

Criterion 1: Include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official (NEPA, Sec. 102 (c)).

Criterion 2: Initial assessments of the environmental impacts of proposed action should be undertaken concurrently with initial technical and economic studies and, where required, a draft environmental impact statement prepared and circulated for comment in time to accompany the proposal through the existing agency review processes for such action. (CEQ ES Guidelines, Sec. 1500.2(b))

a. Findings

The response of the Forest Service to these requirements is the Environmental Analysis process and the Environmental Statement process.

- (1) The Environmental Analysis Report has been incorporated into the planning process as an "everyday working tool." The EAR is used first as an analysis of the need for an ES; that is, it precedes the preparation of an ES if a decision to do a Statement has not already been made. In addition, the EAR is also used after the ES to refine environmental impacts on actions and projects which have been previously dealt with. For example, timber sales all require preparation of an EAR even though the sale of timber within a particular area of a Planning Unit has been indicated as part of the Unit Plan and the Timber Management Plan.
- (2) The Environmental Statement is used by the Forest Service to insure that the major direction and planning documents have given environmental quality careful and appropriate consideration in the planning and decisionmaking process. While the planning system complies with NEPA,

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some methodologies and the general quality and content of some Environmental Statements do not.

- (3) The Forest Service is still undergoing a "learning Process" for Environmental Statement preparation. This has resulted in considerable variation in ES quality. Some sections of the Statements, such as negative environmental impacts and irreversible and irretrievable commitment of resources, are adequate for this stage of the learning process. Other sections generally are of lower quality or are non-existent. The major reasons for this are the lack of specific guidelines for ES preparation, the lack of a method of Servicewide quality control, and budgeting and staffing constraints.
- (4) It is recognized that the Forest Service budget is limited by Congress, and it is recognized that appropriated monies are being fully utilized by Service organizations whose central operations are concentrated on land management. Nevertheless, the activities required by NEPA have resulted in an increase in expenditures in the planning processes. These expenses have included such items as manpower, materials, publications and equipment. The Service estimated the cost of the NEPA-related activities, Servicewide, in fiscal year 1972 at \$8 million. The expenses for fiscal year 1974 are projected to \$9.3 million.

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additional staff is needed at the Forest and District levels to concentrate both on NEPA-related activities and on normal Forest Service jobs. Because of the time required for NEPA-related activities, some normal activities are neglected or only carried out at a maintenance level. This reduction in the total quality of Forest Service work is most evident in the following activities: general engineering activities, road maintenance, cadastral surveying, land exchanges, livestock counting, inspections of range allotments, trail maintenance, project design, road construction, bridge design, campground design and other areas inventory. Action responses have also gradually been slowed down.

- (5) NEPA has caused the Forest Service to delay land use planning in some areas. For example, the NEPA-related controversy at the BWCA has caused the BWCA plan to be given top priority at the expense of planning for the total Superior National Forest. The controversy relating to some of the timber harvesting related activities of the Apache National Forest was one of the reasons for considerable time to be expended developing the Environmental Statement, Timber Management Plan for the forest. Because of this, Unit Planning was delayed until the Fall of 1973.
- (6) The decisions to initiate an ES on a program or action can be made by any line officer. This is appropriate since the officer making the decision is also responsible for

Additional staff is needed in the Forest and District levels to concentrate both on NEPA-related activities and on normal Forest Service jobs. Because of the time required for NEPA-related activities, some normal activities are neglected or only carried out at a maintenance level. This reduction in the total quality of Forest Service work is most evident in the following activities: general engineering activities, road maintenance, cadastral surveying, land exchanges, livestock counting, inspections of range allotments, trail maintenance, project design, road construction, bridge design, campground design and other areas inventory. Action responses have also gradually been slowed down.

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(6) The decision to initiate an ES on a program or action can be made by any line officer. This is appropriate since the officer making the decision is also responsible for

preparing the ES, and for implementing the proposed action.

b. Recommendations

- (1) The policy of requiring an EAR for all actions should continue. In emphasizing the EA/EAR process as an "every-day working tool," all aspects of environmental protection required by NEPA are included in all Forest Service activities.
- (2) The Forest Service personnel who are responsible for preparing ES's need improved guidelines for the preparation of the statements. These should not be so narrow as to restrict innovation but should provide analytical tools, techniques and methods to assist quantification of information. This information can be obtained by providing data concerning the various approaches and methodologies that have been accepted without objection by agencies responsible for implementing NEPA. (Also see Recommendation 2, Section A)
- (3) See Recommendation 2, above.
- (4) The Forest Service should develop a work job-code system so that NEPA-related tasks can be more accurately identified and monitored. Money and staff necessary for NEPA-related activities can then be more realistically accounted for as a component in future budgets. Congress must be made aware, by the most feasible method, of the costs associated with environmental legislation. Public agencies must be allocated the funding necessary to comply with the laws under which they operate.

which they operate.

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(4) The Forest Service should develop a work job-code system

(3) See Recommendation 2, above.

mentation 2, Section A)

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b. Recommendations

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- (5) As soon as it is feasible, additional staff should be made temporarily available to areas that have specific non-Unit Planning priorities in order to facilitate these areas' implementation of the Unit Planning process and the general planning system. This may involve the transfer of Washington Office and Regional staff to Forest and District positions.
- (6) The decentralization of decisionmaking is appropriate since the ES planning process requires the preparation of plans and guidelines at the Region, Forest and District levels, each of which have environmental consequences.

Criterion 3: Types of actions to be assessed include (1) recommendations or favorable reports relating to legislation including requests for appropriations; (2) new and continuing projects and program activities; directly undertaken by Federal agencies; or supported in whole or in part through Federal contracts, grants, subsidies, loans or other forms of funding assistance; (3) the making, modification, or establishment of regulations, rules, procedures and policy. (CEQ ES Guidelines, 1500.5)

a. Findings

- (1) Environmental Statements are "normally required" for the major levels of Forest Service planning - the Area, Forest and Unit. Environmental Statements are also to be considered for almost every other Forest Service action not covered by a higher level ES. Since this decision has already been made, an EAR is not prepared for the project.
- (2) The Forest Service does not normally write Environmental Statements for actions such as individual timber sales that are covered by a program ES.
- (3) Yearly Environmental Statements are being made for some annual projects, such as the Gypsy Moth Suppression Program in the east.

(5) As soon as it is feasible, additional staff should be made temporarily available to areas that have specific non-Unit planning priorities in order to facilitate these areas' implementation of the Unit Planning process and the general planning system. This may involve the transfer of Washington Office and Regional staff to Forest and District positions.

(6) The decentralization of decisionmaking is appropriate since the ES planning process requires the preparation of plans and guidelines at the Region, Forest and District levels, each of which have environmental consequences.

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Findings

- (1) Environmental Statements are "normally required" for the major levels of Forest Service planning - the Area, Forest and Unit. Environmental Statements are also to be considered for almost every other Forest Service action not covered by a higher level ES. Since this decision has already been made, an EIS is not prepared for the project.
- (2) The Forest Service does not normally write Environmental Statements for actions such as individual timber sales that are covered by a program ES.
- (3) Every Environmental Statement is being made for some annual project, such as the Gypsy Moth Suppression Program in the east.

- (4) There are significant Regional deviations in defining the terms major, significant, and controversial, as they are applied to activities that could require an ES. Some areas rely on intuition, while others consider the types of resources involved, or the size of the area involved, or the threat or amount of controversy.

b. Recommendations

- (1) It is questionable that the requirements of NEPA are such that ES's are necessary for Planning Area Guides and/or Forest Plans (Part I). The ES format does not appear to be suited for comprehensive direction and coordinating documents such as these. An EAR should be made for these documents to confirm the ES need and to allow the NEPA-related environmental considerations to aid the decisionmaking process.
- (2) The Forest Service should continue the policy of not writing ES's on actions (such as individual timber sales) that are covered by program ES's (such as for a Timber Management Plan). This requires, however, that environmental impacts be adequately evaluated in the program statement.
- (3) The Forest Service should explore the possibility of long-term programmatic statements for projects that recur in the same areas. The time constraints are restrictive on the staff involved in projects such as the Gypsy Moth Suppression Program. It is possible that the program, which must be carried out during a

(d) There are significant Regional decisions in defining the terms major, significant, and controversial, as they are applied to activities that could require an EIS. Some areas rely on intuition, while others consider the types of resources involved, or the size of the area involved, or the threat or amount of controversy.

b. Recommendations

(1) It is questionable that the requirements of NEPA are such that EISs are necessary for Planning Area Orders and/or Forest Plans (Part II). The EIS format does not appear to be suited for comprehensive decision and coordinating documents such as these. An EIS should be made for these documents to confirm the EIS need and to allow the NEPA-related environmental consideration to aid the decisionmaking process.

(2) The Forest Service should continue the policy of not writing EISs on actions (such as individual timber sales) that are covered by program EISs (such as for a Timber Management Plan). This requires, however, that environmental impacts be adequately evaluated in the program statement.

(3) The Forest Service should explore the possibility of long-term programmatic statements for projects that result in the same areas. The time constraints are restrictive on the staff involved in projects such as the Gypsy Moth Suppression Program. It is possible that the program, which must be carried out during a

specific but short time period, might be canceled because of administrative delay.

- (4) The Forest Service and other government agencies that have the authority to recommend policies to improve environmental protection should provide specific definitions of these terms in order to create uniformity in the decisionmaking process.

Criterion 4: The ES serves as a means of assessing the environmental impact of proposed actions rather than as a justification for the implementation of the proposed action. (CEQ ES Guidelines, Sec. 1500.7)

a. Findings

- (1) The Forest Service Manual complies with this requirement.
- (2) NEPA has required that planners consider environmental impacts and document all possible activity alternatives prior to proposing a course of action. This has resulted in increased information input for decision-making. The Forest Service generally feels that, because of NEPA, they have a better understanding of the environment that they are dealing with and are more objective in proposing actions based on the environmental assessment.
- (3) ES's for certain functional programs are basically justification statements. One of the purposes of this type of ES is to show the environmental consequences of "no action" and the Trade-offs involved. The most current example of this is occurring in Eastern Oregon where a pest had destroyed 60,000 acres of forest. An application to spray with DDT was rejected because of potential environmental

damage. The cumulative impact of this decision is that now at least 600,000 acres of forest have been infested.

- (4) Because of the methodology used, some Unit Plan ES's appear to be action justifications. This is especially true when a group of alternatives are given during the initial public involvement stage and one of those is chosen as the proposed action. This feeling is reinforced if the alternative is not popular with the public.

b. Recommendations

- (1) No recommendation.
- (2) In most Forest Service ES's that have been reviewed, the proposed action appears to be the best management alternative based on analyzing the area characteristics. The Forest Service should continue this procedure.
- (3) Functional programs for areas indicated for specific resource utilization in Unit Plans should deal only with methodological alternatives since the activity has already been environmentally weighed in a Unit Plan ES. Other programs, such as pest spraying activities, emphasize the justification of environmentally damaging actions to eliminate the more damaging alternative of no action. The Forest Service will need to continue to use the ES to "justify" some actions and to enlighten the public of the consequences of "no action".
- (4) The Forest Service should not present possible actions or proposed projects to the public until public input is received concerning their desire for land use.

... The cumulative impact of this decision is that
 now at least 250,000 acres of forest have been lost.
 Because of the magnitude of loss, some 100,000 acres
 appear to be under restoration. This is especially true
 when a group of alternatives was given during the initial
 public involvement stage and one of them is chosen as
 the proposed action. The feeling is reinforced if the
 alternative is not popular with the public.

Recommendations

- (1) The recommendation.
- (2) In most Forest Service cases that have been reviewed, the
 proposed action appears to be the best management al-
 ternative based on analyzing the area characteristics.
 The Forest Service should continue this procedure.
- (3) A national program for areas selected for specific re-
 source utilization in the future should only be made
 ecological alternatives since the activity has already been
 environmentally weighed in a Unit Plan. Other pro-
 grams, such as forest preserving activities, emphasize the
 protection of environmentally damaging actions to elimi-
 nate the more damaging alternative of no action. The
 Forest Service will need to continue to use the ES to
 "justify" some actions and to enlighten the public of the
 consequences of "no action".
- (4) The Forest Service should not present possible actions
 or proposed projects to the public until public input is
 received concerning their desire for land use.

Criteria 5: Utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man's environment. (NEPA, Sec. 102(a))

a. Findings

- (1) Integration of the new planning procedure with work program and annual budgets has not occurred yet although the FY 75 program budget is the Forest Service's first efforts in this area.
- (2) It is now required that the impacts of proposed activities upon all ecologic, economic and sociologic aspects be analyzed and documented. This has necessitated an interdisciplinary approach to planning with varied interests coordinating their efforts. Most Forests and Districts, and some Regions, do not have adequate staffing to meet the interdisciplinary requirements of NEPA. This is especially true of sociologists and economists.
- (3) The main problem facing the Forest Service is the need to upgrade the quality of the planning products. In particular, there is a need to improve the input of sociological, economic, and benefit-cost information, particularly as a means of weighing alternatives with the prepared action or program. This constitutes additional interdisciplinary staff requirements which are difficult to obtain because of funding constraints.
- (4) In some areas, Unit Planning is done only by Forest Planning teams, excluding District Rangers.

...the Government has been able to plan and to coordinate which ... have an impact on the country's development. (UNEP, 1972)

Findings

- (1) Integration of the new planning procedure with work pro-
grams and annual budgets has not occurred yet although
the UN's program budget is the Forest Service's main
source of funds.
- (2) It is now required that the impacts of proposed activities
upon all ecological, economic and sociological aspects be
analyzed and documented. This has necessitated an
interdisciplinary approach to planning with varied interests
contributing their efforts. Most Forests and Districts
and State Regions, do not have adequate training to meet
the interdisciplinary requirements of NEPA. This is ex-
actly the type of specialists and economists.
- (3) The main problem facing the Forest Service is the need
to upgrade the quality of the planning process. In par-
ticular, there is a need to improve the type of socio-
logical, economic, and hard-core information, particu-
larly as a means of weighing alternatives with the pro-
posed action of the program. This requires additional
information and staff requirements which are difficult to
obtain because of funding constraints.
- (4) In some areas, the planning is done only by Forest
Planning teams, excluding District Managers.

b. Recommendations

- (1) There is a need to relate and link the new planning process to program planning such as Environmental Program for the Future and fiscal year program budgets. The Forest Service recognizes this need and has addressed the issue in its development of the conceptual framework referred to as "Unified Planning and Decisionmaking." Current Forest Service budgeting and work programs still reflect a functional management orientation with heavy emphasis on production goals. This functional approach will remain entrenched for a long time unless major efforts are made to incorporate the new planning approach into the daily work tasks of Forest Service officials. This may require the reassessment of budget allocation procedures and funding categories. It will also require a redefinition of roles for members of Regional, Forest and District staffs.
- (2) There does not appear to be a need for some specialists, such as sociologists and economists, at all Forests and Ranger Districts. These and other unique skills should be available at all Regions to give input to the Forests and Districts as required.
- (3) See Section C, Criterion 2, recommendation 4.
- (4) The District Ranger normally has the primary responsibility for implementing planning decisions, and therefore should be included in planning teams as a core member. Where particular problems occur, the Region should

(1) There is a need to revise and take the new planning process to program planning such as Environmental Program

for the future and fiscal year program budgets. The Forest Service recognizes this need and has addressed the issue in the development of the conceptual framework referred to as "Unified Planning and Resource Management." Current Forest Service budgeting and work programs still reflect a functional management orientation with heavy emphasis on production goals. This functional approach will remain entrenched for a long time unless major efforts are made to incorporate the new planning approach into the daily work tasks of Forest Service officials. This work requires the reorganization of budget allocation procedures and funding categories. It will also require a redefinition of roles for members of Regional, Forest and District staffs.

(2) There does not appear to be a need for some specialists such as hydrologists and economists, at all Forest and Ranger Districts. These and other special skills should be available at all Regions to give input to the Forest and Districts as required.

(3) See Section C, Criterion 3, Recommendation 4.

(4) The District Ranger normally has the primary responsibility for implementing planning decisions, and they should be included in planning teams as a core member. When particular problems occur, the Region should

attempt to set up temporary task forces to expedite implementation of the new planning process.

Criterion 6: Agency procedures should include an appropriate early notice system for informing the public of the decision to prepare a draft environmental statement. (CEQ ES Guidelines, 1500.6)

a. Findings

- (1) The Forest Service is meeting this requirement. Most planning teams prepare a schedule of public involvement as the first step in the planning process, and invite public participation during the period when planning goals and objectives are being formulated for specific areas.
- (2) Although the need for public involvement and education regarding planning of the Forests is recognized, there still is a reluctance to actually involve the public on the part of some of the staff. This is probably due to the desire to retain the "status quo" of the past. On the other hand, the demands of the new planning system are resulting in other activities being put off. One of these is the opportunity to deal with the public on an informal basis.
- (3) The public, in many instances, has used NEPA as a vehicle to threaten legal action regarding controversial management practices. The threat of a lawsuit has forced a change in some controversial management activities.
- (4) In many cases, peculiarities of unique situations have resulted in extreme polarity of controversy centering around specific issues. Proposed actions, which usually are compromise plans, will never escape public criticism.

attempt to set up temporary task forces to expedite

implementation of the new planning process.

Criteria for agency procedures should include an agency's ability to inform the public of the decision to prepare a final environmental statement. (GEO 83 Guidelines, 1990.8)

1. Findings

(1) The Forest Service is meeting this requirement. Most

planning teams prepare a schedule of public involvement as the first step in the planning process, and invite public participation during the period when planning goals and objectives are being formulated for specific areas.

(2) Although the need for public involvement and education re-

garding planning of the Forest is recognized, there still is a reluctance to actually involve the public on the part of some of the staff. This is probably due to the desire to retain the "status quo" of the past. On the other hand,

the demands of the new planning system are resulting in other activities being put off. One of these is the opportunity to deal with the public on an informal basis.

(3) The public, in many instances, has used NEPA as a

vehicle to discuss legal action regarding controversial management practices. The threat of a lawsuit has forced a change in some controversial management

activities.

(4) In many cases, questions of resource allocation have

resulted in extreme polarity of controversy concerning

around specific issues. Proposed actions, which usually

are compromise plans, will never escape public criticism.

- (5) All legal activities in the Forest Service are conducted by members of the General Counsel's Office assigned to a Forest Service office. Since the implementation of NEPA, there has been an approximate 500% increase in the number of lawsuits against the service. While the legal activities have greatly increased, there has been no increase in the General Counsel staff assigned to the Forest Service. As a result, normal legal activities are either delayed, or not done, while attorneys are engaged in lawsuits.
- (6) There are three important reasons why the Forest Service has become involved in more controversy than other government agencies with land management responsibilities. First, the Forest Service lands are usually quite large and are contiguous. If the lands were fragmented and interspersed with other holdings, Forest Service activities would not be so obvious. Secondly, Forest Service lands are often hilly or mountainous (particularly in the Appalachians and the Far West) and therefore visible from transportation routes. If the Forest Service managed terrain that was less visible, activities that occurred away from ground transportation routes would not be so obvious. Thirdly, local residents develop a possessiveness about National Forest lands that often ignores the overall needs of the public. For example, timber harvesting is considered unpopular in areas where the local public is involved in recreational uses such as

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hunting, fishing and hiking. Conversely, local commercial interests are unsympathetic to regional and national aesthetic needs for wilderness and primitive areas. A basic problem the FS continually faces is that it is essentially timber financed and is expected to achieve and maintain a high level annual output of timber. This affects the outlook of the FS with regard to its planning responsibilities. However, NEPA has acted as a counter balance in that it gives the FS justification to consider the total environment rather than a single resource. The FS's "new" planning process is one means by which professional foresters can counter unreasonable production demands.

b. Recommendations

- (1) No recommendation.
- (2) The Forest Service should consider expanding their national program of public education to include the new planning process, goals and objectives, and management practices. This is important to insure that the required early public involvement in the planning process is constructive. Some Regions and Forests are doing a commendable job in public involvement and education. An inter-Regional exchange of ideas would facilitate the national implementation of this Program.
- (3) The Forest Service, prior to a threat of legal action, should review management practices that are controversial and prepare Environmental Statements addressing these issues if they are planned for continuation.
- (4) No recommendation.

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 nity interests are emphasized to regional and national
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 gives the FS justification to consider the total environment
 rather than a single resource. The FS's "new" planning
 process is one in which professional interests
 are counter balanced by the protection standards.

Recommendations

- (1) No recommendation.
- (2) The Forest Service should consider expanding their na-
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 inter-Regional exchange of ideas would facilitate the
 national implementation of this Program.
- (3) The Forest Service, prior to a threat of legal action,
 should review management practices that are contrary
 and prepare Environmental Statements addressing
 these issues if they are planned for construction.
- (4) No recommendation.

- (5) The General Counsel's office will probably require additional staff to meet growing legal responsibilities resulting from environmental law suits.
- (6) No recommendation.
- (7) No recommendation.

Criterion 7: The responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate Federal, State and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality and to the public as provided by section 552, title 5, United States Code, and shall accompany the proposal through the existing agency review processes. (NEPA, Sec. 102(c))

a. Findings

- (1) The Forest Service is complying with this requirement. All agencies with expertise pertinent to the specific environmental impacts and issues are requested to comment on Forest Service ES's. The public that is concerned with the particular issues also receives this request.
- (2) In some cases, reviews of Forest Service ES's by other agencies tend to be reactive to the document rather than to the solution of the problem.
- (3) The Forest Service requires that all ES's be sent to the EPA. The personnel of this agency are often not aware of the problems associated with particular projects or with the processes of the Forest Service. This is due to an apparent rapid turnover in EPA personnel and to its newness.

b. Recommendations

- (1), (2) Federal agencies (and the Forest Service) should familiarize

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b. Recommendations

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a. Findings

the existing agency review processes. (NPSA, Sec. 101(c))
5. United States Code, and shall accompany the proposal through
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shall be made available to the President, the Council on Environ-
are authorized to develop and enforce environmental standards,
views of the appropriate Federal, State and local agencies, which
impact involved. Copies of such statement and the comments and
tion by law or special expertise with respect to any environmental
and obtain the comments of any Federal agency which has jurisdic-
Catherine T. The responsible Federal official shall consult with

(7) No recommendation.

(8) No recommendation.

from environmental law suits.

tion staff to meet growing legal responsibilities resulting
(5) The General Counsel's office will probably respond with-

themselves with the planning processes, goals, objectives and problems of other agencies in order to adequately comment on Environmental Statements.

- (3) The Forest Service should provide the EPA with sufficient information in the EIS concerning problems associated with particular projects or processes. In addition, the Forest Service could provide a concise narrative of the planning - ES process involved as an appendix item in the ES. The agency should also encourage commenting EPA staff members to visit the site of the project or action, whenever possible and appropriate.

Criterion 8: Environmental Statements will contain a description of the proposed action, a statement of its purposes, and a description

of the environment affected, including information, summary technical data, and maps and diagrams where relevant, adequate to permit an assessment of potential environmental impact by commenting agencies and the public. (CEQ ES Guidelines, Sec. 1500.8)

a. Findings

- (1) The Forest Service adequately complies with this requirement.

b. Recommendations

- (1) No recommendation.

Criterion 9: Environmental Statements will assess the probable impact of the proposed action on the environment. This requires agencies to assess the positive and negative effects of the proposed action. (CEQ ES Guidelines, Sec. 1500.8)

a. Findings

- (1) The Forest Service ES guidelines adequately comply with this requirement.
- (2) The discussion of environmental impacts in Forest Service ES's is generally a brief descriptive list. The impacts described are primarily negative in nature. Most impact

described are primarily negative in nature. Most impact

is generally a brief descriptive list. The impacts

(3) The discussion of environmental impacts in Forest Service

with this requirement.

(4) The Forest Service EIS Guidelines adequately comply

Findings

Criterion 8: Environmental Statements will assess the probable
impact of the proposed action on the environment. This requires
agencies to assess the positive and negative effects of the proposed
action. (CEQ EIS Guidelines, Sec. 1500.8)

(1) No recommendation.

Recommendations

(1) The Forest Service adequately complies with this requirement.

Findings

of the environment affected, including information, summary, and
cost data, and maps and diagrams where relevant, adequate to permit
an assessment of potential environmental impact by commenting
agencies and the public. (CEQ EIS Guidelines, Sec. 1500.8)

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the proposed action, a statement of its purpose, and a description

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(3) The Forest Service should provide the EPA with sufficient

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lives and problems of other agencies in order to adequately

themselves with the planning process, goals, objec-

sections observed did not address impacts that occur at a distance from the area under discussion. Secondary and cumulative impacts are also not usually analyzed.

- (3) Most ES's lack a comprehensive section pertaining to positive effects of proposed actions. This has resulted in the ES's emphasizing only the negative effects of projects and does not comply with Environmental Statement guidelines.

b. Recommendations

- (1) No recommendation.
- (2) Forest Service ES's must contain a detailed description of the environmental impacts. In the case of negative impacts, mitigating measures should also be included.
- (3) It is recognized that many actions have short-term negative impacts. A comprehensive positive impacts section should be included in all ES's. With the inclusion of this section, public understanding of the Forest Service activities should increase. (Also see Section C, criterion 6, recommendation 2.)

Criterion 10: Environmental Statements will contain alternatives to the proposed action, including, where relevant, those not within the existing authority of the responsible agency and including the alternative of taking no action or of postponing action pending further study; alternatives requiring actions of a significantly different nature which would provide similar benefits with different environmental impacts and alternatives related to different designs or details of the proposed action which would present different environmental impacts. (CEQ ES Guidelines, Sec. 1500.8)

a. Findings

- (1) The Forest Service manuals comply with this requirement.
- (2) NEPA, being a full disclosure law, forces the Forest Service to examine all known environmental impacts, and con-

actions described the not address impacts that occur at a distance from the area under discussion. Secondary and cumulative impacts are also not usually analyzed. Also, EIS's lack a comprehensive section pertaining to positive effects of proposed actions. This was needed in the EIS's emphasizing only the negative effects of projects and not comply with Environmental Statement guidelines.

Recommendations

- (1) No recommendation.
- (2) Forest Service EIS's must contain a detailed description of the environmental impacts. In the case of negative impacts, mitigating measures should also be included.
- (3) It is recognized that many actions have short-term negative impacts. A comprehensive positive impacts section should be included in all EIS's. With the inclusion of this section, public understanding of the Forest Service activities should increase. (Also see Section C, criterion 6, recommendation 2.1)

Criterion 6: Environmental statements will contain alternatives to the proposed action, including, where relevant, those not within the existing authority of the responsible agency and including the alternative of taking no action or of postponing action pending further study; alternatives require review of a significantly different nature which would provide similar benefits with different environmental impacts and alternatives related to different designs or details of the proposed action which would present different environmental impacts. (NEQ EIS Guidelines, Sec. 1500.8)

Findings

- (1) The Forest Service message comply with the requirement.
- (2) NEPA, being a full disclosure law, forces the Forest Service to examine all known environmental impacts, and con-

sider a full range of management alternatives, including those that the agency does not have the authority to take action upon.

Most of the ES's that were observed during the case studies concerned land allocation. All of the Unit Plan ES's stressed resources, however, either emphasizing different utilization (or non-utilization) locations, or different sizes of resource management areas. In some of these cases the alternatives are limited and tend to justify the proposed action. In addition, alternatives tend to be limited by Forest Service legal constraints or past practices. Only one case study ES looked at alternative methods of planning before looking at management objectives.

- (3) In some areas, the preparation of land use alternatives as a part of an information package has prevented public input from evaluating trade-offs and activity interaction.
- (4) In some cases, the complete compliance with the guidelines for alternatives does not seem feasible.
- (5) In some areas, such as the O and C lands, Government land is fragmented and intermixed with private land that that is usually devoted to extensive resource use.

b. Recommendations

- (1) No recommendation.
- (2) In deriving alternatives, planning emphasis should be considered prior to the analysis of management areas. The Forest Service planning teams should follow the guidelines in FSM 8400 and those published by CEQ

guidelines in FPM 8400 and those published by CEG

- The Forest Service planning teams should follow the considered prior to the analysis of management areas.
- (2) In deriving alternatives, planning emphasis should be
 - (3) No recommendation.

Recommendations

- (a) that is usually devoted to extensive resource use.
- (b) land is fragmented and intermixed with private land that
- (c) in some areas, such as the O and C lands, Government
- (d) lines for alternatives does not seem feasible.
- (e) In some cases, the complete compliance with the guide-
- (f) and from evaluating trade-offs and actively interaction.
- (g) a part of an information package has provided public in-
- (h) In some areas, the preparation of land use alternatives as

of planning before looking at management objectives.

them. Only one case study ES looked at alternative methods limited by Forest Service legal constraints or past prac- the proposed action. In addition, alternatives tend to be these cases the alternatives are limited and tend to justify latent areas of resource management areas. In some of different allocation for non-utilization) decisions, or the ES's assessed resources, however, either emphasizing studies conducted land allocation. All of the Unit Plans Most of the US's that were observed during the same

action plan. states that the agency does not have the authority to take under a full range of management alternatives, including

in alternative selection whenever it is feasible. These documents state that the following types of alternatives should be considered along with a cost benefit analysis of each:

- (a) No action.
 - (b) Different actions to provide similar benefits.
 - (c) Different design or details that would have different impacts.
 - (d) Measures to provide for compensation of fish and wildlife losses.
- (3) The development of alternative land use plans should only be made after both the staff and the public have had the opportunity to consider guidelines, objectives and priorities and analyze the available resource inventory data.
- (4) The Forest Service, in an ES, has made the following observation concerning the "no action" alternative and compliance with the Multiple Use/Sustained Yield Act. "To exclude all timber harvest is not consistent with good forest, wildlife or watershed management, and would prevent the application of silviculture treatment within the framework of management objectives of the forest."

The ES guidelines should recognize that there are certain cases where different interpretations of the law should be made. It should also be recognized that the alternative of changing the law is not always feasible. It is not recommended that changes in important environmental laws such as the Wilderness Act should be considered as viable alternatives.

in alternative selection whenever it is feasible. These documents state that the following types of alternatives should be considered along with a cost benefit analysis

of each:

- (a) No action.
- (b) Different action to provide similar benefits.
- (c) Different design or details that would have different impacts.
- (d) Measures to provide for compensation of fish and wildlife losses.

(3) The development of alternative land use plans should only be made after both the staff and the public have had the

opportunity to consider guidelines, objectives and priorities and analyze the available resource inventory data.

(4) The Forest Service, in an EIS, has made the following observation concerning the "no action" alternative and

compliance with the Multiple Use/Sustained Yield Act. "To exclude all timber harvest is not consistent with

good forest, wildlife or watershed management, and would prevent the application of silviculture treatment

within the framework of management objectives of the forest."

The EIS guidelines should recognize that there are certain cases where different interpretations of the law

should be made. It should also be recognized that the alternative of changing the law is not always feasible.

It is not recommended that changes in important environmental laws such as the Wilderness Act should be con-

sidered as viable alternatives.

- (5) It should be recognized that different land management alternatives are not always feasible. In an area where numerous "private" segments of land are being utilized for extensive timber production, alternatives that address recreation or scenic beauty are not logical for enclaves of Forest Service land. All guidelines for ES preparation and NEPA implementation should take land tenure and use into consideration.

Criterion 11: Environmental Statements will consider the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity. (CEQ ES Guidelines, Sec. 1500.8)

a. Findings

- (1) The Forest Service Manuals comply with this requirement.
- (2) The discussion of the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity has been inadequate in all ES's.

b. Recommendations

- (1) No recommendation.
- (2) This section must be expanded, particularly in timber management programs, to emphasize that many negative impacts are only short term, while the main impacts are generally positive and long term in nature.

(2) It should be recognized that different land management alternatives are not always feasible. In an area where numerous "private" segments of land are being utilized for extensive timber production, alternatives that address protection of scenic beauty are not logical for boundaries of Forest Service land. All guidelines for ES protection and NEPA implementation should take land tenure and use into consideration.

Citation 11: Environmental Statements will consider the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity. (CEQ 15 Guidelines, Sec. 1500.8)

Findings

- (1) The Forest Service Manual's comply with this requirement.
- (2) The discussion of the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity has been inadequate in all EIS's.

Recommendations

- (1) No recommendations.
- (2) This section must be expanded, particularly in timber management programs, to emphasize that many negative impacts are only short term, while the main impacts are generally positive and long term in nature.

APPENDICES

BUREAU OF LAND MANAGEMENT

APPENDIX 1: CONTENT OF ENVIRONMENTAL STATEMENTS

AND

REVIEW PROCEDURES

(BLM Manual 1972)

I. Content of Environmental Statements

The following outlines the content of environmental statements:

- A. Cover Sheet. Include the type of statement, a brief but descriptive title, the responsible organization (Bureau of Land Management), date, and signature of the responsible Bureau official (draft) or the Director (final).
- B. Summary Sheet. Prepare a one-page summary sheet (in triplicate) in accordance with Section 6(e) and Appendix I of the CEQ Guidelines.
- C. Body of Statement. Cover all eight sections listed below.
 1. Description of the Proposal. Describe the proposed or recommended action under consideration, its purpose, where it is to be located, when it is to take place, and its interrelationship with other projects or proposals. Include information and technical data sufficient to permit assessment of environmental impact by commenting agencies. Provide reference to supporting project or program documents and include one-page maps as necessary.
 2. Description of the Environment. Include a comprehensive description of the existing environment without the proposal and the probable future

APPENDIX B: CONTENT OF ENVIRONMENTAL STATEMENTS

AND

REVIEW PROCEDURES

(BLM Manual 1652)

I. Content of Environmental Statements

The following outlines the content of environmental statements:

A. Cover Sheet. Include the type of statement, a brief but descriptive title, the responsible organization (Bureau of Land Management), date, and signature of the responsible Bureau official (draft) or the Director (final).

B. Summary Sheet. Prepare a one-page summary sheet (in triplicate) in accordance with Section 8(a) and Appendix I of the BLM Guidelines.

C. Body of Statement. Cover all eight sections listed below.

1. Description of the Proposal. Describe the proposed or recommended action under consideration, its purpose, where it is to be located, when it is to take place, and its relationship with other projects or proposals. Include information and technical data sufficient to permit assessment of environmental impact by consulting agencies. Provide reference to supporting project or proposal documents and include one-page maps as necessary.

2. Description of the Environment. Include a comprehensive description of the existing environment without the proposal and the probable future

environment without the proposal. Focus both on the environmental details most likely to be affected by the proposal and on the broader regional aspects of the environment, including ecological interrelationships. Include a description of the present and projected level of economic development, land use, and related cultural factors, where appropriate.

3. The Environmental Impact of the Proposed Action. Describe all environmental impacts of the proposed action which may occur if no mitigating measures are taken. The narrative must make it clear that unmitigated impacts are being discussed. These impacts include direct or indirect changes in the existing environment, whether beneficial or adverse. Wherever possible, these impacts should be quantified. Include the impact not only upon the natural environment, but upon land use and social well-being as well. Provide separate discussion for such potential impacts as man-caused accidents and natural catastrophes and their probabilities and risks. Identify unknown or partially understood impacts specifically.
4. Mitigating Measures Included in the Proposed Action. Wherever appropriate, prepare a section on mitigating factors, discussing measures which are proposed to be taken or which are required to be taken to enhance, protect, or mitigate impacts upon the environment, including any associated research or monitoring. Include environmental clauses and stipulations for contracts, leases, or other documents used for entitlements of use which help mitigate adverse impacts. It is proper to describe mitigating factors which will be imposed by Federal, State, and local agencies as well as mitigating factors which applicants have firmly agreed to employ.
 - a. With respect to water quality aspects of proposed actions which have been previously certified by the appropriate State or interstate authority as being in substantial compliance with applicable water quality standards under the provisions of the Federal Water Pollution Control Act, as amended, include reference to that certification. Include the comments of the State or interstate authority that made the certification, and the comments of the Environmental Protection Agency. Such certification does not absolve the Bureau of its responsibility to analyze impacts on water quality; it may be that even though the action meets State and Federal standards, the environmental costs are nonetheless great enough to outweigh the economic and technical benefits of the proposed action.
 - b. With respect to water and air quality aspects of proposed actions which have been found by the Environmental Protection Agency to meet the requirements of Section 4(a)(1) of Executive Order 11507, Prevention, Control, and Abatement of Air and Water Pollution at Federal Facilities, include reference to this finding.

environment with the proposed. Focus both on the environmental details and likely to be affected by the proposed and on the broader regional aspects of the environment, including ecological, historical, and cultural. Include a description of the present and projected level of economic development, land use, and related cultural factors, where appropriate.

3. The Environmental Impact of the Proposed Action. Describe all environmental impacts of the proposed action which may occur as a result of the proposed action. The narrative must state clearly that anticipated impacts are being discussed. These impacts include direct or indirect changes in the existing environment, whether beneficial or adverse. However possible, these impacts should be quantified. Include the impact not only upon the natural environment but upon land use and social well-being as well. Provide separate discussion for each potential impact as man-caused accidents and natural catastrophes and their probabilities and risks. Identify unknown or partially understood impacts specifically.

4. Mitigating Measures Included in the Proposed Action. Whenever appropriate, prepare a section on mitigating factors, discussing measures which are proposed to be taken or which are required to be taken to enhance, protect, or mitigate impacts upon the environment, including any associated research or monitoring. Include environmental changes and mitigation for construction, testing, or other documents used for environmental impact of use which help mitigate adverse impacts. It is proper to discuss mitigating factors which will be imposed by Federal, State, and local agencies as well as mitigating factors which applicants have already agreed to employ.

5. With respect to water quality aspects of proposed actions which have been previously certified by the appropriate State or interstate authority as being in substantial compliance with applicable water quality standards under the provisions of the Federal Water Pollution Control Act, as amended, include reference to that certification. Include the comments of the State or interstate authority that made the certification, and the comments of the Environmental Protection Agency. Such certification does not absolve the Bureau of its responsibility to analyze impacts on water quality; it may be that even though the action meets State and Federal standards, the environmental costs are none-the-less great enough to outweigh the economic and technical benefits of the proposed action.

6. With respect to water and air quality aspects of proposed actions which have been found by the Environmental Protection Agency to meet the requirements of Section 401(a)(1) of Executive Order 11500, Prevention, Control, and Abatement of Air and Water Pollution at Federal Facilities, include reference to this finding.

5. Any Adverse Effects Which Cannot be Avoided Should the Proposal be Implemented. Include a discussion of the unavoidable adverse impacts described under Items 3 and 4 above, the relative values placed upon those impacts, and an analysis of who or what is affected and to what degree affected. This section provides an opportunity to systematically identify the environmental impacts; to subtract, to the extent that quantification is possible, the effect of mitigating measures to reduce adverse impacts; and to identify a net residual of adverse effects which cannot be eliminated.
6. The Relationship between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity. Discuss the local short-term use of the environment involved in the proposed action in relation to its long-term impacts on the productive capacity of the area both for the same use and for a variety of uses. Analyze the cumulative long-term impact of this action combined with the effects of all actions with similar environmental impacts.

Short-term refers to the period of time during which the proposed action and associated restoration take place. Long-term refers to the time period beyond the point in time when the area should have been restored.

7. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should It be Implemented. Discuss, and quantify where possible, any irrevocable uses of resources, including such things as resource extraction, massive erosion, destruction of archaeological or historical sites, elimination of endangered species' habitat, and irrevocable changes in land use.
8. Alternatives to the Proposed Action. Describe the possible environmental impacts, both beneficial and adverse, of all reasonable alternatives--alternatives to the action which are technologically feasible and reasonably available, including alternatives which are beyond the existing authority of the Bureau. The alternative of no action must be accounted for. For each alternative, identify the unmitigated environmental impacts (clearly indicate that unmitigated impacts are being discussed); where quantification is possible, subtract the effect of mitigating measures to reduce adverse impacts; and identify a net residual of adverse effects which cannot be avoided, as required under Item 5 above, so that a comparison of the net residual of adverse effects for all reasonable alternatives can be made.

Consultation and Coordination with Others.

1. Consultation and Coordination in the Development of the Proposal and in the Preparation of the Draft Statement. Describe the public participation efforts of the Bureau and consultations with Federal,

5. Any adverse effects which cannot be avoided should be avoided, minimized, or compensated for. This includes a discussion of the unavoidable adverse impacts described under items 3 and 4 above, the relative values placed upon those impacts, and an analysis of who or what is affected and to what degree affected. This section provides an opportunity to systematically identify the environmental impacts; to subject, to the extent that quantification is possible, the effect of mitigating measures to reduce adverse impacts; and to identify a net residual of adverse effects which cannot be eliminated.

6. The relationship between long-term uses of land and environment and the short-term and long-term impacts of the proposed action is discussed in relation to the long-term impacts on the productive capacity of the area both for the same use and for a variety of uses. Analyze the cumulative long-term impact of this action combined with the effects of all actions with similar environmental impacts.

Short-term refers to the period of time during which the proposed action and associated restoration take place. Long-term refers to the time period beyond the point in time when the area should have been restored.

7. Any irreversible and unfavorable comments of resources which would be involved in the proposed action should be identified, discussed, and quantified where possible, any irreversible uses of resources, including such things as resource extraction, massive erosion, destruction of archaeological or historical sites, elimination of endangered species, habitat, and irreversible changes in land use.

8. Alternatives to the proposed action. Describe the possible environmental impacts, both beneficial and adverse, of all reasonable alternatives to the action which are technologically feasible and reasonably available, including alternatives which are beyond the existing authority of the Bureau. The alternative of no action must be accounted for. For each alternative, identify the anticipated environmental impacts (clearly indicate that anticipated impacts are being discussed; where quantification is possible, subject the effect of mitigating measures to reduce adverse impacts; and identify a net residual of adverse effects which cannot be avoided, or reported under item 5 above, so that a comparison of the net residual of adverse effects for all reasonable alternatives can be made.

Consultation and Coordination with Others

1. Consultation and Coordination in the Development of the Proposal and in the Preparation of the Draft Statement. Describe the public participation efforts of the Bureau and consultations with Federal,

State, local, and individual interests in the development of the proposal and the preparation of the draft statement.

2. Coordination in the Review of the Draft Statement. Describe the way in which the draft statement is being disseminated and list those organizations and experts from whom comments are being requested. Upon preparation of the final statement expand this section to indicate those organizations and experts from whom comments were received, their disposition, and any unresolved conflicts; and to summarize any public response.

E. Attachments.

1. Draft Statements. Normally, draft statements will not have attachments; however, in some cases it may be appropriate to attach environmental assessments, evaluations, or reports prepared by applicants or by Bureau staff. Reports solicited from consultants or from other Federal Agencies by the Bureau in order to obtain environmental information for the statement may also be attached; these reports should not be confused with official comments, which are attached only to the final statement.
2. Final Statements.
 - a. In addition to appropriate environmental assessments, evaluations, or reports identified in .22E1 above, attachments to final statements should include all official comments in written form from:
 - Departmental Bureaus and offices with delegated jurisdiction or special environmental expertise;
 - Other Federal Agencies with jurisdiction by law or special environmental expertise;
 - State and local agencies which are authorized to develop and enforce environmental standards;
 - Responsible private organizations and associations which represent the opinions of wider groups concerning the proposed action or its environmental impact; and
 - Recognized experts
 - b. Official comments received from organizations and individuals, other than those identified in .22E2 above, need not be attached to the final statement, but should be retained with the complete statement record.

d. Official comments received from organizations and individuals, other than those identified in 3.2.2 above, need not be attached to the final statement, but should be retained with the complete statement record.

-- Responsible private organizations and associations which represent the opinions of wider groups concerning the proposed action or its environmental impact; and

-- State and local agencies which are authorized to develop and enforce environmental standards;

-- Other Federal Agencies with jurisdiction by law or special environmental expertise;

-- Departmental bureaus and offices with delegated jurisdiction or special environmental expertise;

e. In addition to appropriate environmental assessments, evaluations, or reports identified in 3.2.2 above, attachments to final statements should include all official comments in written form from:

2. Final Statements.

1. Draft Statements. Normally, draft statements will not have attachments; however, in some cases it may be appropriate to attach environmental assessments, evaluations, or reports prepared by applicants or by Bureau staff. Reports solicited from consultants or from other Federal Agencies by the Bureau in order to obtain environmental information for the statement may also be attached; these reports should not be confused with official comments, which are attached only to the final statement.

3. Attachments.

2. Coordination in the Review of the Draft Statement. Describe the way in which the draft statement is being disseminated and list those organizations and experts from whom comments are being requested. Upon preparation of the final statement expand this section to indicate those organizations and experts from whom comments were received, their disposition, and any unresolved conflicts; and to summarize any public response.

State, local, and individual interests in the development of the proposal and the preparation of the draft statement.

II. Review

The Bureau has established mechanisms to achieve interagency coordination and consultation and to input public response and reflections during the review of the draft statement. The following reflects verbatim these mechanisms:

Governmental Agencies

A. Coordination and Consultation with Departmental Bureaus and Offices, Other Federal and Federal - State Agencies

1. Agencies Whose Comments Should be Requested. Section 7 and Appendix II of the CEQ Guidelines are used to identify those agencies from which comments should be requested. The comments of all agencies with which the Bureau has national or local interagency agreements relating to the action should be requested.

Federal-State agencies are established with authority and funding from both the Federal and State governments to accomplish regional planning and development; e.g., Appalachian Regional Commission, Delaware River Basin Commission.

- a. Informal Consultations. Working level consultations with all Departmental and other Federal and Federal-State agencies which have jurisdiction or special expertise related to a proposed action, including the Environmental Protection Agency, should be established at the earliest possible time. A description of the proposed action, or other portions of the draft statement, may be circulated to obtain informal comments and technical input.

The Environmental Protection Agency shall be consulted on matters related to air or water quality standards, noise control, solid waste disposal, pesticide regulation, radiation criteria and standards, or other provisions of the authority of EPA.

- b. Official Review. Draft statements should be sent to the appropriate offices indicated in Appendix III of the CEQ Guidelines. Official review and comments should be requested from EPA even if the action under consideration has been certified by the appropriate State or interstate pollution control authority. (See .22C4a above.) The Bureau

The Bureau has established mechanisms to achieve interagency consultation and coordination and to input public response and reflection during the review of the draft statement. The following reflects various mechanisms:

Governmental Agencies

A. Coordination and Consultation with Departmental Bureaus and Offices, Other

Federal and Federal - State Agencies

1. Agencies whose comments should be requested. Section 7 and Appendix II of the CEQ Guidelines are used to identify those agencies from which comments should be requested. The comments of all agencies with which the Bureau has national or local interagency agreements relating to the action should be requested.

Federal-State agencies are established with authority and funding from both the Federal and State governments to accomplish regional planning and development, e.g., Regional Development Commission, Delaware River Basin Commission.

2. Internal Consultations. Working level consultations with all Departmental and other Federal and Federal-State agencies which have jurisdiction or special expertise related to a proposed action, including the Environmental Protection Agency, should be established at the earliest possible time. A description of the proposed action, or other portions of the draft statement, may be circulated to obtain internal comments and technical input.

The Environmental Protection Agency shall be consulted on matters related to air or water quality standards, noise control, solid waste disposal, pesticide regulation, radiation criteria and standards, or other provisions of the authority of EPA.

3. Official Review. Draft statements should be sent to the appropriate offices indicated in Appendix III of the CEQ Guidelines. Official review and comments should be requested from EPA even if the action under consideration has been certified by the appropriate State or Interstate Pollution Control Authority. (See, 2202a above.) The Bureau

official responsible for preparation of a statement should consult with all Federal Agencies which submit official comments where this consultation would help to resolve questions or obtain additional information.

2. Simultaneous Review. The draft statement may be circulated simultaneously for official review to Departmental Bureaus and Offices and to other Federal and Federal-State as well as State and local agencies.
3. Time Limit for Official Comments. A period of not less than 45 days should be established for reply, after which it may be presumed, unless the agency requests a specific extension of time, that the agency consulted has no comment to make. Where time is a critical factor, time limits of 30 days may be established. A period of 45 days will always be allowed for EPA review.

B. Coordination with State and Local Agencies.

1. Use of Established Review Procedures. Where no formal public hearing has been held on the proposed action at which the appropriate State and local review has been invited, and where review of the proposed action by State and local agencies authorized to develop and enforce environmental standards is relevant, such review is provided through other established review procedures.
 - a. Federal Water Projects. For Federal water and related land resources plans, projects, and programs, review by State and local governments will be through procedures set forth by the Water Resources Council (Section III E of Policies, Standards, and Procedures in the Formulation, Evaluation, and Review of Plans for Use and Development of Water and Related Land Resources, approved by the President on May 15, 1962, and printed as Senate Document 97, 87th Congress; Handbook for Coordination of Planning Studies and Reports, June 1969).
 - b. Direct Federal Development Projects. For State and local review of direct Bureau development projects as required by OMB Circular No. A-95, review will be through State and regional or metropolitan clearinghouses in accordance with Bureau procedures established pursuant to Circular No. A-95 and 511 DM 5, Intergovernmental Relations. Consult the Director (230).
 - (1) Direct Bureau development projects may include construction of Federal buildings and installations; other Federal public works; or acquisition, use, or disposal of Federal land and real property.

official responsible for preparation of a statement should consult with all Federal Agencies which submit official comments where this consultation would help to resolve questions or obtain additional information.

2. State Agency Review. The draft statement may be circulated simultaneously for official review to Departmental Bureaus and Offices and to other Federal and General-State as well as State and local agencies.

3. Time Limit for Official Comments. A period of not less than 45 days should be established for reply, after which it may be presumed, unless the agency requests a specific extension of time, that the agency concurred and no comment is made. Where time is a critical factor, this limit of 30 days may be extended. A period of 45 days will always be allowed for EPA review.

B. Coordination with State and Local Agencies

1. Use of Established Review Procedures. Where no review audit hearing has been held, or the proposed action is within the appropriate State and local review has been invited, and where review of the proposed action by State and local agencies authorized to develop and review the proposed standards is relevant, such review is required through other established review procedures.

2. Federal Water Pollution Control Act. For Federal water and related land resources plans, projects, and programs, review by State and local governments will be through procedures set forth in the Water Resources Council (Section III) of Policies, Standards, and Procedures for the Protection, Evaluation, and Review of Plans for Use and Development of Water and Related Land Resources, approved by the President on May 12, 1955, and related to Senate Document 87, 87th Congress, S. 1000 for Coordination of Planning Studies and Reports, June 1955.

3. Direct Federal Development Projects. For State and local review of direct Federal development projects as required by DM Circular No. 4-57, review will be through State and regional or metropolitan commissions in accordance with Bureau procedures established pursuant to Circular No. 4-55 and 51 DM 2, Interagency Relations. Consult the Director (530).

(1) Direct Bureau development projects may include construction of Federal buildings and installations; other Federal public works; or acquisition, use, or disposal of Federal land and real property.

- (2) The Bureau notifies established State, regional and local clearinghouses at the earliest practicable stage in project and always early enough to allow State and local agencies to determine the compatibility of Bureau plans with their own development plans and programs. (See 1785.)
- (3) Clearinghouse procedures will be utilized for major construction of buildings and installations, and for major land use changes or new uses. The Bureau has other systems of continuing cooperative relations with State and local governments. The requirements for use of clearinghouses are in addition to, and will not replace, existing procedures for coordination.

c. Actions Affecting the Cultural or Historic Environment. For actions affecting the cultural or historic environment, review by State and local agencies will be through procedures set forth by the Advisory Council on Historic Preservation (36 F.R. 3310), and draft statements will reflect consultations with the State Liaison Officer for Historic Preservation and with the State Archaeologist. Consult the Director (370).

- (1) National Historic Landmarks, and landmarks of State or local significance listed in the National Register of Historic Places may be involved; they may be on or near public lands.
- (2) If a proposed use or disposal of public land affects an historic landmark, the Bureau consults with the State Liaison Officer appointed under the National Historic Preservation Act of 1966, and with the Regional Director, National Park Service. If the effect is adverse, submit a report to the Director (300) for review and submission to the Advisory Council on Historic Preservation.

d. Actions Affecting Indian Lands. For actions having an impact on Indian lands or communities, review by State and local agencies shall also include review by appropriate Indian tribal governing bodies.

2. Use of Clearinghouses. Where the procedures under .25B1 above are not appropriate, review and comment by State and local agencies authorized to develop and enforce environmental standards may be obtained by distributing the draft statement to the appropriate

(15) The Bureau will be notified of any proposed action affecting the National Historic Register of Historic Places and will be notified of any proposed action affecting the National Historic Register of Historic Places and will be notified of any proposed action affecting the National Historic Register of Historic Places.

(16) Clearinghouse procedures will be utilized for major changes in land use, including the National Historic Register of Historic Places and will be notified of any proposed action affecting the National Historic Register of Historic Places.

(17) The Bureau will be notified of any proposed action affecting the National Historic Register of Historic Places and will be notified of any proposed action affecting the National Historic Register of Historic Places.

(18) The Bureau will be notified of any proposed action affecting the National Historic Register of Historic Places and will be notified of any proposed action affecting the National Historic Register of Historic Places.

(19) The Bureau will be notified of any proposed action affecting the National Historic Register of Historic Places and will be notified of any proposed action affecting the National Historic Register of Historic Places.

(20) The Bureau will be notified of any proposed action affecting the National Historic Register of Historic Places and will be notified of any proposed action affecting the National Historic Register of Historic Places.

(21) The Bureau will be notified of any proposed action affecting the National Historic Register of Historic Places and will be notified of any proposed action affecting the National Historic Register of Historic Places.

State and regional or metropolitan clearinghouses, unless the Governor of the State involved has designated some other format for obtaining this review, or unless the clearinghouses instruct the Bureau to obtain review and comments directly from the State and local agencies.

3. Time Limit for Review Through Clearinghouses. Clearinghouse procedures allow State and local agencies 30 days for initial comment with an extension of 30 days upon request.

Public Participation

Existing procedures for involving the public and its representatives in basic planning for all Bureau activities should be used as much as possible. Effective two-way communications should be developed between the Bureau and the public providing for the exchange of information on environmental conditions and environmental impacts of resource management actions.

Although public meetings and hearings are not required for all environmental statements, the Bureau will follow a policy of assuring that the public has a full opportunity to participate in the process of statement preparation. Mechanisms for assuring public participation include informal consultations, notices, public meetings, and formal public hearings.

A. Providing Information to the Public. The public will be provided timely information and material sufficient for an understanding of plans and programs with environmental impact in order to obtain the views of interested parties. This may include a draft environmental statement and/or documents containing input to the draft statement. The public will also be provided information on alternative courses of action.

B. Public Meetings and Hearings. For statements requiring public meetings or hearings, the guidance below applies.

1. With Draft Statement.

- a. If a draft statement is prepared prior to a scheduled hearing, the statement will be made available to the public 15 days, and preferably 30 days, prior to the hearing date.
- b. If the Bureau declines to favor an alternative until public hearings or meetings are held to obtain the comments of the public, a draft statement may be prepared and made available indicating that two or more alternatives are under consideration.

State and local agencies, unless the Governor of the State involved has designated some other agency for obtaining this review, or unless the clearinghouse instructs the Bureau to obtain review and comments directly from the State and local agencies.

3. Time Limit for Review through Clearinghouse. Clearinghouse procedures of the State and local agencies 30 days for initial comment with an extension of 30 days upon request.

Public Participation

Existing procedures for involving the public and its representatives in basic planning for all Bureau activities should be used as much as possible. Effective two-way communication should be developed between the Bureau and the public providing for the exchange of information on environmental conditions and environmental aspects of resource management actions.

Although public meetings and hearings are not required for all environmental statements, the Bureau will follow a policy of ensuring that the public has a full opportunity to participate in the process of statement preparation. Mechanisms for ensuring public participation include informal consultations, notices, public meetings, and formal public hearings.

4. Providing Information to the Public. The public will be provided timely information and material sufficient for an understanding of plans and programs with environmental impact in order to obtain the views of interested parties. This may include a draft environmental statement and/or document containing input to the draft statement. The public will also be provided information on alternative courses of action.

5. Public Meetings and Hearings. For statements requiring public meetings or hearings, the guidance below applies.

1. With Draft Statement.

a. If a draft statement is prepared prior to a scheduled hearing, the statement will be made available to the public 30 days, and preferably 60 days, prior to the hearing date.

b. If the Bureau declines to issue an alternative draft public hearing or meeting is held to obtain the comments of the public, a draft statement may be prepared and made available indicating that and on more alternatives are under consideration.

2. Without Draft Statement.

- a. No draft statement is needed for a public hearing or meeting if the purpose of the meeting or hearing is to obtain information for preparation of a statement.
- b. In some cases, public hearings or meetings may be desirable at two or more stages of the planning for or formulation of a Bureau action, e.g., for both the general and specific plans for a Bureau program. No draft statement is needed for a hearing if the purpose is to elicit comments for preparation of plans and for subsequent environmental analysis.
- c. After a draft statement has been made available to the public, additional public hearings and meetings may be scheduled to obtain additional information.

C. Highly Controversial Actions. The Bureau will follow a policy of holding public meetings and hearing whenever public concern over the potential environmental impact of an action is high.

D. Public Hearing Procedures. Public hearing procedures are provided in 455 DM 1. (BLM Manual designation).

E. Notice of Hearings.

1. Notice in Federal Register. Notice of all formal public hearings will be published in the Federal Register no less than 30 days before the hearing date. All Federal Register notices relating to hearings dealing with the preparation of an environmental statement will be accompanied by a highlight statement.
 - a. With Draft Statement. The Federal Register notice announcing the availability of a draft statement for public review should include a schedule of all known hearing dates. This notice is cleared by the Assistant Secretary, Program Policy and the Solicitor.
 - b. Without Draft Statement. If hearings are scheduled before a draft statement is made available to the public, or if additional hearings are scheduled after the Federal Register notice announcing the availability of a draft statement for public review has already been published, the Federal Register notice announcing the hearing(s) is signed by the Director.

2. Without Draft Statement

- a. No draft statement is needed for a public hearing or meeting if the purpose of the meeting or hearing is to obtain information for preparation of a statement.
- b. In some cases, public hearings or meetings may be desirable at two or more stages of the planning for or formulation of a proposed action, e.g., for both the general and specific plans for a future program. No draft statement is needed for a hearing if the purpose is to elicit comments for preparation of plans and for subsequent environmental analysis.
- c. After a draft statement has been made available to the public, additional public hearings and meetings may be scheduled to obtain additional information.

C. Highly Controversial Actions. The Bureau will follow a policy of holding public hearings and meetings whenever public concern over the potential environmental impact of an action is high.

D. Public Hearing Procedures. Public hearing procedures are provided in 455 DM 1. (See Manual Section 1.)

E. Notice of Hearings

1. Notice in Federal Register. Notice of all formal public hearings will be published in the Federal Register no less than 30 days before the hearing date. All Federal Register notices relating to hearings dealing with the preparation of an environmental statement will be accompanied by a night-light statement.
- a. With Draft Statement. The Federal Register notice announcing the availability of a draft statement for public review should include a schedule of all known hearing dates. This notice is cleared by the Assistant Secretary, Program Policy and the Solicitor.
- b. Without Draft Statement. If hearings are scheduled before a draft statement is made available to the public, or if additional hearings are scheduled after the Federal Register notice announcing the availability of a draft statement for public review has already been published, the Federal Register notice announcing the hearing(s) is signed by the Director.

2. Notice by Letter. Appropriate Federal, Federal-State, State and Local agencies, and other organizations and individuals as appropriate, may also be notified by letter of scheduled public hearings. (See .34B below).
3. Press Releases. Press releases will announce all scheduled public hearings.
 - a. With Draft Statement. The press release announcing the availability of a draft statement for public review should include a schedule of all known hearing dates. This press release is cleared by the Assistant Secretary, Program Policy and the Solicitor, in addition to regular Departmental channels. (See .23, .34C and Illustration 5.)
 - b. Without Draft Statement. If hearings are scheduled before a draft statement is made available to the public, or if additional hearings are scheduled after the availability of a draft statement for public review has been announced, the press release is approved by the Director and cleared through regular Departmental channels.

The generally less palatable shrub members appear to be little or none, as the grass plants are in very poor vigor. Very few grass plants are found in the openings between the shrubs. The open areas are covered entirely bare ground, with a very few small grass plants or annual herbs. Most of the perennial grass plants are under partial protection of the shrubs, and a very high percentage have dead centers or the base portion of the plant consists of a small tuft on the edge of a dead plant.

Most of the perennial grass plants have been grazed off close to the ground and species identification is difficult. No seedling or young plants could be found on a 1/2-mile tract. Some grasses, big sage, shrubs and other plants are seedlings and beginning establishment. Total vegetation density within the community averages less than 25%.

3. Chesapeake - This community exists in the western portion of the area, on the relatively steep slopes. The community is almost a monotype of chesapeake (Larrea tridentata). Scattered plants of rabbit brush (Chrysothamnus sp.) are found throughout the community. A very few small shrubs of artemisia and other species are found in parts of the community.

The community appears to exist as a result of continuous grazing by sheep. The few remaining perennial grass plants are in poor vigor and heavily grazed. Other than chesapeake, the only plants found are rabbit brush. Volume of chesapeake and grasses grow varies very directly with the quantity of spring snow melt. The community is approximately 25% chesapeake.

5. Notice by Letter. Appropriate Federal, Federal-State, State and local agencies, and other organizations and individuals as appropriate, may also be notified by letter of scheduled public hearings. (See 34B below).
3. Press Release. Press releases will announce all scheduled public hearings.

- a. With Draft Statement. The press release announcing the availability of a draft statement for public review should include a schedule of all known hearing dates. The press release is cleared by the Assistant Secretary, Program Policy and the Solicitor, in addition to regular department channels. (See 33, 34C and Illustration 2.)
- b. Without Draft Statement. If hearings are scheduled before a draft statement is made available to the public, or if additional hearings are scheduled after the availability of a draft statement for public review has been announced, the press release is approved by the Director and cleared through regular department channels.

APPENDIX 2

NARRATIVE: DEGRADED ENVIRONMENTAL QUALITY

DEQ-7 AREA (Truckee-Olinghouse), Carson City District, Nevada

I. This area contains three (3) distinguishable vegetative communities found within the cold desert biome - salt desert shrub, big sage-grass, and annual grass-forb (cheatgrass).

A. Vegetative community descriptions

1. Salt desert shrub - This community extends eastward from the mouth of Pierson and Olinghouse Canyons. The vegetative community contains in order of degree of occurrence: greasewood, rabbitbrush, shadscale, big sage, indian rice grass, squirrel tail grass, cheatgrass, annual forbs (buckwheat, indian paint brush, sego lily, etc.), Mormon tea, bud sage, perennial buckwheat, purple sage, and other unidentified forbs. More than 70% of the bio-mass consists of greasewood, rabbit brush and shadscale.

The generally less palatable shrub members appear to be quite vigorous, but the grass plants are in very poor vigor. Very few grass plants are found in the openings between the shrubs. The open areas are almost entirely bare ground, with a very few cheat grass plants or annual forbs. Most of the perennial grass plants are under partial protection of the shrubs, and a very high percentage have dead centers or the live portion of the plant consists of a small tuft on the edge of a dead plant.

Most of the perennial grass plants have been grazed off close to the ground and species identification is difficult. No seedling grass plants could be found on a 1/2-mile transect. Some greasewood, big sage, shadscale and purple sage seedlings are becoming established. Total vegetative density within the community averages less than 25%.

2. Cheatgrass - This community exists in the western portion of the area, on the relatively steep slopes. The community is almost a mono-type of cheatgrass (*bromus tectorum*). Scattered plants of rabbit brush (*chrysothamnus* var.) are found throughout the community. A very few remnant plants of sytanion and stipa grasses are found in parts of the community.

The community appears to exist as a result of successions following repeated fires. The few remnant perennial grass plants are in poor vigor and heavily grazed. Other than cheatgrass, the only seedlings found are rabbit brush. Volume of bio-mass and ground cover percent vary annually with the quantity of spring moisture available. The bio-mass is approximately 85% cheatgrass.

APPENDIX 2

NARRATIVE: DEGRADED ENVIRONMENTAL QUALITY

DEC-7 AREA (Truckee-Olinghouse), Carson City District, Nevada

1. This area contains three (3) distinguishable vegetative communities found within the contiguous biome - salt desert shrub, big sage-grass, and annual grass-forest (chestgrass).

A. Vegetative community descriptions

1. Salt desert shrub - This community extends eastward from the mouth of Pierson and Olinghouse Canyons. The vegetative community contains in order of degree of occurrence: greasewood, rabbitbrush, shadscale, big sage, Indian ricegrass, spiny cholla, chestgrass, annual forbs (buckwheat, Indian paintbrush, sagebrush, etc.), Mormon tea, big sage, perennial grasses, and other unidentified forbs. More than 70% of the biomass consists of greasewood, rabbitbrush and shadscale.

The generally less palatable shrub members appear to be quite vigorous, but the grass plants are in very poor vigor. Very few grass plants are found in the openings between the shrubs. The open areas are almost entirely bare ground, with a very few cheat grass plants or annual forbs. Most of the perennial grass plants are under partial protection of the shrubs, and a very high percentage have dead centers or the live portion of the plant consists of a small tuft on the edge of a dead plant.

Most of the perennial grass plants have been grazed off close to the ground and species identification is difficult. No seedling grass plants could be found on a 1/2-mile transect. Some greasewood, big sage, shadscale and native sage seedlings are beginning established. Total vegetative density within the community averages less than 25%.

2. Chestgrass - This community exists in the western portion of the area on the relatively steep slopes. The community is almost a mono-type of chestgrass (brown festoon). Scattered plants of rabbitbrush (chrysothamnus var.) are found throughout the community. A very few perennial plants of greasewood and other grasses are found in parts of the community.

The community appears to exist as a result of successional following repeated fires. The few remaining perennial grass plants are in poor vigor and heavily grazed. Other than chestgrass, the only seedlings found are rabbitbrush. Volume of biomass and ground cover percent vary annually with the quantity of spring moisture available. The biomass is approximately 85% chestgrass.

3. Big sage grass - This community exists in the northern and central portions of the area, and appears to be a remnant of a community that extended westward and originally occupied the area of the cheatgrass community.

The vegetation is primarily big sage and rabbit brush, with interspersed sytanion and stipa grass. Small spots of dense cheatgrass are scattered through the community. The perennial grass plants on the more moderate slopes were in poor vigor and heavily grazed. The grass plants on the steeper slopes were in good vigor, but were sparse in distrubution and only a few grass seedlings can be observed.

The volume of the biomes is approximate 50% big sage and vegetation density is approximately 30%.

B. Animals - Tracks, pellets and den holes in the three vegetative communities are very sparse and indicate a low jack rabbit and other rodent population. No road kills were noted in the area. Only one jack rabbit and 2 hawks were seen during a day's trip through the area. Three cows and many cow tracks were observed, but only one set of bobcat tracks and 2 sets of coyote tracks were found in the area. The animal community appears to be almost identical in all three vegetative communities except for the chukar population in the cheatgrass. (See wildlife URA foor list of species.)

Cows are a major element of the animal population. (See Range URA for data on numbers, etc.)

C. Non-Living

1. Water is very limited in the area. Rainfall is less than 8"/year and less than 1 inch falls between June 1st and October 1st.

2. Air quality - area is within the 700' air pollution inversion layer of the Reno area. Periodic air pollution occurs from the Eagle Pichur Gypsum and Fernley Cement plants. (See recorded data.)

3. Land - soils are porous and alluvial in the desert shrub community, but are shallow. Soils in the cheatgrass and big sage - grass communities is primarily volcanic and relatively shallow clays. There are a number of talus slopes in these areas that have never contained soils. Most of the area covering the three communities exhibits a past soil loss of 2 to 3 inches and some continuing erosion on the steeper slopes and in the desert shrub community. Erosion appears to be heavy on jeep roads in the steep areas.

D. Ecological Interrelationships

1. Between Biomes - The transition zone between the cold desert communities and the pinyon-juniper biome is very limited. The

juniper does not appear to invade the cold desert biome in this area. This is primarily due to the lack of moisture. There is some invasion of cheat grass from the cheat grass community into the pinyon-juniper biome in wet years.

There appears to be some drifting of bird life and domestic livestock between the biomes.

2. Between Communities - The animal populations, including domestic livestock, seem to drift between the vegetative communities. Other than the chukar population, primarily in the cheat grass community, with some drift into the big sage grass community, the animals seem to be closely interrelated within the between all three communities.

There appears to be slight interrelation between vegetation in the communities. Perhaps due to a lack of perennial grass seed. Cheat grass is a species present naturally in all three communities. Rabbit brush does seem to have invaded the steep slope areas of the big sage - grass communities. With the heavy grazing of perennial grass plants, little seed is being produced, and shadscale and greasewood would not normally invade the steeper slopes with shallow soil.

3. Between Organisms and the Community

a. In the desert shrub community - The indian rice grass, squirrel tail grass, and shadscale appear to be the key vegetative species, and are heavily used in this order by the animals. Rodents - mice, jackrabbits, ground squirrels and domestic livestock appear to be the key animals.

Livestock and rodents compete for the key forage, and the rodent is the key link in the web of food chains for the coyote, bobcat, rattle snake, hawk and golden eagle populations resident in the area. The present low rodent population, apparently affected by the heavy grazing by livestock, is probably the major reason for the apparent low populations of the predator species.

b. In the big sage - grass community - The key vegetation is the perennial grass plants, and animal relationships are as noted in "a" above, except there is some deer winter use on the sage brush on the higher slopes.

c. In the cheatgrass community, the key vegetation is cheat-grass as the area is almost a mono-type in spots. The chukar partridge, rodents and domestic livestock are the key animal species. In most years, there would be little competition between the animals for use on the cheatgrass. However, dry spring and early summers could reduce the cheatgrass production drastically. Also with the many fires through the area, rodent and chukar populations can be heavily decimated. Present populations appear to be low because of past fires. Present grass production is much above normal.

juniper does not appear to invade the cold desert biome in this area. This is primarily due to the lack of moisture. There is some invasion of cheat grass from the cheat grass community into the juniper-juniper biome in wet years.

There appears to be some drifting of bird life and domestic livestock between the biomes.

2. Between Communities - The natural populations, including domestic livestock, seem to drift between the vegetation communities. Other than the cheat grass population, primarily in the cheat grass community, with some drift into the big sage grass community, the animals seem to be closely interrelated within the between all three communities.

These appear to be slight interrelations between vegetation in the communities. Perhaps due to a lack of perennial grass seed. Cheat grass is a species present naturally in all three communities. Rabbit brush does seem to have invaded the steep slope areas of the big sage - grass communities. With the heavy grazing of perennial grass plants, little seed is being produced, and shrubs and grasses would not normally invade the steeper slopes with shallow soil.

3. Between Populations and the Community

a. In the desert shrub community - The native rice grass, squirrel tail grass, and shrubs appear to be the key vegetation species, and are heavily used in this order by the animals. Rodents - mice, jackrabbits, ground squirrels and domestic livestock appear to be the key animals.

Livestock and rodents seem to be the key forage, and the rabbit is the key link in the web of food chains for the coyote, bobcat, rattlesnake, hawk and golden eagle populations resident in the area. The present low rodent population, apparently affected by the heavy grazing by livestock, is probably the major reason for the apparent low populations of the predator species.

b. In the big sage - grass community - The key vegetation is the perennial grass plants, and animal relationships are as noted in "a" above, except there is some deer winter use on the sage brush on the steeper slopes.

c. In the cheatgrass community, the key vegetation is cheat-grass as the area is almost a mono-type in spots. The cheat-grass, rodents and domestic livestock are the key animal species. In most years, there would be little competition between the animals for use of the cheatgrass. However, dry spring and early summers could reduce the cheatgrass production drastically. Also with the heavy fire through the area, rodent and cheat-grass populations can be heavily decimated. Present grass production appears to be low because of past fire. Present grass production is much above normal.

d. In all three communities it appears that with the April 1st livestock turnout date, the majority of the valuable forage plants are overgrazed during the critical growing period of the species and little food can be stored by the plants. This results in die-back and dead centered plants. With the heavy grazing, few seed stalks survive and little seed is produced.

E. Hydrologic Cycle - With the area lying in the 8-inch and less rainfall precipitation zone and most of the moisture occurring during the winter months, the operation of the hydrologic cycle has many inefficiencies.

The central and western portions of the area are generally steep slopes, with a southern exposure, and shallow soils. Those slopes have a quick runoff with little moisture absorption in the soils even in the winter months.

Precipitation averages less than 1 inch between June 1st and October 1st and occurs generally as light scattered thunderstorms.

With very high soil temperatures during this same time period, a major portion of the moisture in the light storms evaporates upon contacting the ground. Thus, little water is absorbed or available for seedling growth. As the shallow clay soils store little winter water, these areas are, therefore, naturally fragile and are difficult to restore to a healthy condition.

The eastern portion of the area is primarily an alluvial fan of porous but fairly shallow soils. The area rapidly stores winter moisture as few water courses are visible. The area also lies in the same rainfall zone as the other portions of the area. It therefore has the same problem of evaporation of storm moisture due to high soil temperatures. Although this portion of the area does have groundwater storage, there is probably a very high water loss during the summer due to the high percentage of phreatophytic vegetation.

Studies show that the salt desert shrub type with high percentage of rabbit brush and greasewood can transpire over 2 acre-feet of water/acre during a summer season.

Water availability to non-phreatophytic species, therefore, can become a serious problem in this type.

APPENDIX 3

ENVIRONMENTAL PROFILE

LANDSCAPE VALUES FOR PYRAMID-LONG VALLEY PLANNING UNITS, CARSON CITY DISTRICT, NEVADA

Type: Type A - Honey Lake Valley, a large high desert valley.

Theme: Vast and sun-drenched the open expanses of this lonesome, windswept valley quietly stretch to its starkly distant and encircling mountains.

Features: Bright and raw two alkali flats (7-12) lend their bleached and empty features to the surrounding desert brush covered (6) valley floor.

Barren slopes (5) give way to rugged rocky hills (1-3) in the north. The valley (6) extends on into corridors (2-4) before terminating at passes.

An ancient inland sea pounding on a low ridge (8) has left terracing that records a violent past.

Rugged mountains rise abruptly (9-14) to the south and east. Their dramatic rise serves to further isolate the valley.

A rolling and sometimes rugged foothill zone (13) joins the two mountain (9-14) ranges and provides a pass through them.

The cooling shade trees and inviting fields of this isolated ranch (11) and its adjacent pastures (10) serves to reinforce and call attention to the stark loneliness of the Honey Lake Valley.

Spot

Features: Situated high in a brush and grass covered canyon on the northeast slope of Fort Sage Mountain stands a small isolated grove of Jeffrey Pine.

Remote from its normal habitat this lonesome grove lends its feature to the overall starkness of the area.

APPENDIX 3

ENVIRONMENTAL PROFILE

LANDSCAPE VALUES FOR PYRAMED-LONG VALLEY PLANNING UNIT, CARSON CITY DISTRICT, NEVADA

Type:	Type A - Honey Lake Valley, a large high desert valley.
Themes:	Vast and awe-stretched the open expanse of this landscape, wilderness valley quietly stretch to its starkly distant and encircling mountains.
Features:	Eight and two small lake (7-12) less their bleached and empty basins to the surrounding desert brush covered (8) valley floor. Barren slopes (5) give way to rugged rocky hills (6) in the north. The valley (6) extends on into canyons (3-4) before terminating at passes. An ancient inland sea ponding as a low ridge (9) has left reflecting that records a violent past. Rugged mountains rise abruptly (9-10) to the north and east. Their dramatic rise serves to further isolate the valley. A rolling and sometimes rugged foothill zone (11) joins the two mountain (3-14) ranges and provides a pass through them. The rolling shade-trees and inviting hills of this isolated ranch (11) and its adjacent pastures (10) serves to reinforce and call attention to the stark loneliness of the Honey Lake Valley. Spaced high in a brush and grass covered canyon on the northeast slope of Fort Sage Mountain stands a small isolated grove of Jeffrey Pine. Remote from the normal habitat this lonesome grove leads the feature to the overall starkness of the area.

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